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WHAT FURTHER CONTRIBUTION CAN RADIOLOGY MAKE TO MEDICINE?

Chairman's Address

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As Chairman of the Section on Radiology, I wish to take this opportunity to pay my respects to the older generation of radiologists who have contributed so much to the science of radiology and who have left such a wonderful heritage to medicine. To the younger generation of radiologists I wish to say that much progress can yet be made. It has been said that radiology has reached its "peak." I am not in accord with this opinion, and I do not believe that radiology has reached its peak, in either the field of diagnosis or that of therapy. The roentgen ray has become so basic to the practice of medicine that it will be used in some form as long as there are diseases to diagnose and patients to treat. Furthermore, being basic in its portrayal of anatomy and of physiologic and pathologic conditions, or the treatment of these conditions, its development will be in direct ratio to the progress made in our knowledge of these diseases.

Research studies will continue to be necessary for advancement in the field of radiology. While accidental discoveries may be made, as in all branches of science, the greater progress will be made by well planned research. At present, the radiologists competent to do research are too busy with the daily routine to attempt any amount of well organized research. This situation will be corrected as more radiologists are available for the general routine practice of radiology. However, research investigations are not necessarily limited to large institutions where there is a large mass of material for study. As a matter of fact, radiologists can derive a great deal of benefit and pleasure from the continual research studies in their own private offices and from small groups of cases well investigated and analyzed. Such studies should be encouraged.

In the field of therapy, radiologic equipment has improved faster than the ability of the radiologist to understand and utilize it. The mechanical factors involved in the use of the therapy equipment almost requires the knowledge and experience of a trained physicist to utilize fully the possibilities of this apparatus. At the same time, the application to the patient necessitates a detailed knowledge of medicine. Again, the expense of this equipment is frequently beyond the range of the average radiologist. Already skill in manufacturing is not only simplifying apparatus but also reducing costs. It is therefore possible to visualize a much wider distribution of efficient equipment. However, progress in the field of radiation therapy will depend on the radiologist's ability to understand the possibilities of his equipment and its application to the disease which he wishes to treat. Such ability, at the present time, is limited to a very few radiologists, and these same radiologists are handicapped by a lack of time for progress in research. In the treatment of malignant disease, 100 per cent accuracy in diagnosis and treatment is almost absolutely necessary, together with the daily observation of the patient. Furthermore, our knowledge of the therapeutic dosages of any form of irradiation is still inadequate. As recently pointed out by Martin, in spite of its importance, the time factor is still very poorly understood. Complete ionization of the rays within the tumor cells is the desired goal in radiation therapy, and yet various radiologists are observed to use voltages from 140 to 1,000 kilovolts for the treatment of similar tumors in similar cases. It does not seem that such a wide range of kilovoltage can be correct. In other words, there is at hand a wide range of voltage for the treatment of disease with roentgen rays, and much progress will be made when there is better knowledge for the selection and application of voltage.

The reactions within the body cells, either tumor or other tissue cells, as a result of the application of some form of irradiation are still poorly understood. In spite of all the research that is being carried on, there have been inadequately detailed studies of such tissue cell reaction. Until such information is available, a truly scientific application of irradiation cannot be had. As just suggested, it makes a great deal of difference as to whether the rays applied to the surface of the body are completely ionized within the tumor cell and as to whether this ionization is a lethal dose for that tumor cell or whether it is a fraction of a lethal dose and repeated at some indefinite time. For the ultimate in the treatment of disease, it is evident that the radiologist must have an intimate knowledge of the pathologic changes in the disease which he is undertaking to treat. Time will simplify many of these problems and will bring to the radiologist the knowledge of his apparatus and of the disease, so that there will be definite increased efficiency in his treatment of diseased conditions.

CHEMOTHERAPY AND RADIATION THERAPY

It is known that some diseases are due to a virus infection, in which the virus is intracellular and cannot be reached by chemical therapy. There is the possibility that the use of radiation therapy for the destruction of such cells may make chemical therapy more effective. This theory has a similar application already recognized in the treatment of infection in which the leukocytes are broken down by the roentgen ray and

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enable the blood plasma to have access to the bacteria. The field of chemical therapy is still very young, and it may be found that the roentgen or radium ray needs the aid of such chemical therapy for the destruction of tumor cells which are now highly resistant to such irradiation. There is already some evidence that, while testosterone or diethylstilbestrol may have little value in the treatment of certain malignant conditions and while the roentgen or radium rays by themselves may have little value in such treatment, the combination of this testosterone or diethylstilbestrol and radiation therapy may have a most desired result. Such investigations of chemical therapy offer considerable promise for the future. Likewise, the use of radiation therapy in the treatment of ordinary infections of a wide variety has had insufficient usage. The radiologist has been too busy with the treatment of more serious conditions.

RADIOACTIVE ISOTOPES

A more recent addition to the field of radiation therapy has been the radioactive isotopes. While the use of the radioactive isotopes has been of definite help in the treatment of a few diseases, their greatest value has been in the study of physiologic processes. It is as yet too early to say what ultimate contribution the radioactive isotopes will make to radiation therapy. The very knowledge of nuclear physics which they bring may be the deciding factor necessary for the study of the effect of irradiation on the tissue cells. Certainly, medicine can expect not only advance in the knowledge of the effects of irradiation on tissue cells, but also a wider and more efficient application of this knowledge to the sick patient. Television clinics will definitely aid in the transmission of this scientific information to a larger and larger group of radiologists.

DIAGNOSTIC ROENTGENOLOGY

In the field of diagnostic roentgenology, it would seem that after all the ingenious methods for utilizing the roentgen ray in diagnosis one could not expect much further progress. Extensive contributions have been made to the diagnosis of almost every disease—as to its development, character and methods for treatment—but newer diagnostic methods are continually being revealed, as evidenced by the recent developments in angiocardiography and photoroentgenography and of the use of the electronic fluoroscope as proposed by Chamberlain. This fluoroscope with its great increased intensity of the light image can revolutionize diagnostic procedures. Color photography as applied to the roentgen ray has not yet been successful. New methods of living continually develop new types of diseases, as in the field of industry, and the radiologists have met this challenge by developing methods for the study and diagnosis of such new diseases.

ROENTGEN FOLLOW-UP

Roentgen examination following the administration of various pharmaceutic products has been used to some extent, but its possibilities for the study of the action of drugs on both animals and human beings have not been fully explored. After the administration of a drug, the roentgen examination can be and has been employed to study the effect of this drug either on the physiologic processes of the body or its beneficial effect for the treatment of disease. The control of drug administration can be much more accurately directed by such studies. Likewise, the results of surgical treatment can often be more definitely determined by roentgen examination than by the ordinary observation of the patient.

It can be said that most of the efforts in the development of methods for the diagnosis of diseases with the roentgen ray have been directed toward the acute illnesses. As previously stated, the roentgen examination is basic in the practice of medicine in that it portrays not only normal anatomy but the physiologic and pathologic variations of this anatomy. In fact, such an examination, as one of the abdomen, may often be superior to surgical exploration, and it may rank next to an autopsy as to the extent of organs visualized and in the accuracy of their portrayal.

ROENTGEN LIFE SPAN STUDIES

If our very ingenious methods of roentgen diagnosis were applied to the examination of the human being from infancy to adult life, there would be roentgen records of a life span of a patient's anatomy, and by demonstrating the physiologic and pathologic changes they would reveal the beginnings of the organic diseases. With the present understanding of the effects of the roentgen examination and modern methods, it is possible to make such repeated examinations without risk to the patient. The short exposure technics have made the roentgen examination of the young infant a daily and almost routine procedure and have given the pediatrician the valuable bit of information so necessary to his diagnosis. The young infant is not able to describe his pain. After the achievements of radiology in the diagnosis and study of the acute illnesses, it would seem that radiology's responsibility to medicine would be now to attack the problems of the chronic diseases which so often have their beginnings in infancy and early childhood and which kill at 50. This is not a new theme, as I have spoken of this before, but I do not believe that the radiologists are yet thinking in terms of the conquest of the chronic diseases. This is chiefly due to the fact that no radiologist follows the same patient long enough to observe the beginning of a chronic illness and its fatal termination, and the radiologists have been too busy with the diagnosis of acute illnesses which are often more demanding of attention. On the other hand, it is my opinion that when radiology does earnestly attack the problem of the recording of the beginning and progression of the chronic illnesses it will make one of its greatest contributions to medicine. I know that this will be done. Already certain research investigations have proved its importance and feasibility. The study of only an occasional patient from infancy through life, in either a large clinic or a private office, is most stimulating in its revelations. The pediatrician has his own pediatric hospital or ward in the general hospital, and the internist has his separate hospital. The internist, in general, is not interested in the child, and the pediatrician is not interested in the adult. In other words, there has been no important correlation for the study of disease between the physicians interested in the infant or young child and those interested in the adult. It is most important for the physician to realize, when seeing a patient with an acute exacerbation of a chronic disease, that the underlying pathologic process has been present for years. There are a few radiologists interested in such studies, and there has been an occasional organized effort to study the life span of the chronic diseases, but usually such efforts are ultimately confined to studies of growth and development, and the

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possibilities of roentgen study are neglected. The roentgen examination where combined with well planned physical and laboratory examination can record the changes in human anatomy over a period of many years and can reveal those processes within the body which cannot be determined by any other method. When the life span of the chronic disease is recorded it will be a most fascinating story of the physiologic activities of the body and of the attack on them by pathologic processes which bring destruction. Therefore, it can be expected that radiology will not only continue to keep pace with the rest of medicine in the study of acute illnesses as the newer diseases appear but will also respond to its responsibility and make another great contribution to medicine in its study of chronic diseases.

304 Republic Building (2).

ACUTE OBSTRUCTION OF THE SMALL BOWEL

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The physiologic and pathologic abnormalities caused by acute obstruction of the small bowel have been studied in many clinics and laboratories. The result has been a better understanding of the problem, but the mortality rate for these lesions is still high. A survey of 198 patients with this lesion, observed in the University Hospital in the years 1934 to 1947, has been made and subjected to critical analysis, with the hope of improving the diagnosis and treatment in similar cases in the future. In all patients included in the study the diagnosis of mechanical intestinal obstruction and its causation was confirmed by operation or necropsy. Patients with primary paralytic ileus and those with nonoperative relief of obstruction have been excluded. It is now recognized [1] that the fluids lost by vomiting and other mechanisms, together with the absent intake of food and drink, result in profound dehydration from water and electrolyte deficiency. The accurate replacement of these losses and correction of the chemical abnormalities is imperative when possible. Wangensteen [2] has shown that with decompression the distended bowel maintains its viability and function and the dangers of operation are reduced. Infection with or without an associated factor of toxemia is the commonest cause of death. With the advent of the antibiotics, it has been shown that [3] the lethal effects of bacterial growth can be importantly diminished by treatment with streptomycin or massive doses of penicillin. Strangulation is the most serious complication of obstruction, resulting as it may in shock from blood loss into the involved part and in perforation with resulting peritonitis. Several of these important therapeutic measures have been developed during the years included in this study and were not available to patients treated in the earlier period.

From the Department of Surgery, University of Michigan Medical School, Ann Arbor, Mich.
Read before the Section on Surgery, General and Abdominal, at the Ninety-Seventh Annual Session of the American Medical Association, Chicago, June 23, 1948.

1. Abbott, W. E.; Mellors, R. C., and Muntwyler, E.: Ann. Surg. **117**: 39-51, 1943. Elman, R., and Hartman, F.: Surg., Gynec. & Obst. **53**: 307-315, 1931. Gendel, S., and Fine, J.: Ann. Surg. **110**: 25-36, 1939.

2. Wangensteen, O. H.: Intestinal Obstructions, Springfield, Ill., Charles C Thomas, Publisher, 1942.

3. Harper, W. H., and Blain, A.: Bull. Johns Hopkins Hosp. **76**: 221-244, 1945. Blain, A.; Kennedy, J. D., and Calihan, R. J.: Alexander Blain Hospital Bull. **5**: 144-170, 1946. Farris, J. M., and Romack, H. H.: Univ. Hosp. Bull., Ann Arbor **12**: 90-92, 1946.

RESULTS

In table 1 are listed the causes of obstruction. It is not usual in statistical analyses of small bowel obstruction to include patients with primary cancers of the colon. We have included certain of them in this group since their presenting sign was acute small bowel distention. The mortality rate is high, 38.3 per cent, and has shown but slight improvement over the years (fig. 1), in spite of the advances in our knowledge just cited. A further evaluation of the causes of death is informative. These are listed in table 2 under thirteen categories. Peritonitis accounted for the greatest number of deaths. Fourteen patients in this group were not operated on. Four were admitted to other services where they were under treatment for other disease, the diagnosis of obstruction being made only at autopsy. Another 4 patients entered the hospital moribund and died before treatment could be instituted. The general condition of 3 patients never permitted operative relief for their obstruction, and in 3 other patients, because of known carcinomatosis, operative intervention was not advised. The latter entered the hospital for terminal nursing care. In the peritonitis group at least one third might have survived their disease had a diagnosis of obstruction been made earlier. We will refer again to the importance of early diagnosis. Thirty-three patients, or 43.4 per cent, of those dying had a strangulation type of obstruction at operation or necropsy. Eleven of these died as a result of overwhelming peritonitis resulting from strangulation. In 2 patients with massive intestinal infarction, extreme blood loss contributed greatly to rapid death.

Intestinal Anastomosis.—Intestinal anastomoses were carried out in 70 patients as part of the operative treatment, and death resulted from peritonitis in 8 of these patients because of leakage at the suture lines. In 1 patient generalized peritonitis was present at the time of operation. In 6 of those in whom leakage occurred a side to side type of approximation was used. One recognizes the dangers of failure in the union of loops of bowel sutured together at a time when one or both loops are the site of edema and inflammation. Frequently one must join these loops in spite of their structural defects, but we have questioned ourselves further concerning these failures. We can only speculate concerning the type of anastomosis employed in these fatal cases. It is a common and natural procedure to place the loops side by side and to make the opening between them at a position between the mesenteric and antimesenteric borders. Since the circulation of the bowel springs in a sharply segmental form from the mesenteric border to meet at the antimesenteric border, we suspect that in those cases of leak, in which the anastomosis was made near the mesenteric border, there may have been interruption of the terminal branches which led to necrosis of the bowel wall in the segment of the arc distal to the point of interruption.

This concept is affirmed by the observations of Cokkinis,[4] who found by injection studies on human beings that collateral circulation in the small intestine stops with the terminal row of vascular arcades (fig. 2)

4. Cokkinis, A. J.: J. Anat. **64**: 200-205, 1930.

and that there are absolutely no anastomoses between the vasa recta of the mesentery or between the ramifying vessels on the small gut wall. In addition, anastomoses across the middle portion of the antimesenteric border of the gut are very few, since, after injection of laboratory specimens with india ink, this central longitudinal area was completely free of visible vessels.

Perforation and peritonitis resulted in death in 5 patients with simple obstructing lesions in the small intestine. In 4 of these operation was postponed in favor of a trial of further conservative management. We wish to emphasize the view that, since operation alone will eventually cure, it should be used at the earliest possible time compatible with the state of the complications.

Most of the remaining causes of death need little comment. One must emphasize the role that the wise employment of the antibiotics and of anticoagulants and an accurate administration of water, electrolytes and blood may play in hastening a favorable outcome. Massive hemorrhage from the colon might have been prevented or controlled in 1 patient, who died of this complication, had our knowledge and source of vitamin K been available at the time this patient was treated. Our present concept of the prevention of pulmonary embolism was not known when this happened. Pneumonia will be common in patients with severe distention. Wound infection secondary to contamination of the abdominal wall was commoner before the use of delayed closure and of antibiotics. High spinal anesthesia in a patient with unilateral pneumothorax for tuberculosis would seem today an obvious error. In short, one can state that in these very sick patients with obstruction and its complications every care is necessary in the use of any supportive or operative technic.

In 60 patients with primary cancer of the colon the outstanding clinical feature was distention of the small bowel, with vomiting and colic. Usually a scout roentgenogram of the abdomen should give more or less definite information regarding the site of obstruction, whether it be colon, small bowel or both. Depending on the function of the ileocecal valve, obstruction in the colon may or may not result in distention of the small bowel with vomiting. If the valve resists pressure, the distention will be limited to the colon with threat of cecal perforation. If it is incompetent and small bowel distention and regurgitation results, it may be difficult to judge accurately the site of obstruction from the roentgenogram. Decompression of the obstructed small bowel by the Miller-Abbott [5] tube, as advocated by Abbott and Johnston,[6] has become common practice. Our experience coincides with that of others in that its successful passage results in relief of distention, vomiting and colic and a general improvement in the patient.

TABLE 1.—*Causes of Small Bowel Obstruction*

	Number of Patients		
	Total	Survived	Died
Adhesions	39	28	11
Volvulus	23	11	12
Intussusception	31	20	11
Carcinoma left colon	37	25	12
Carcinoma transverse colon	10	5	5
Carcinoma right colon	13	11	2
Carcinomatosis	15	9	6
Carcinoma small bowel	5	4	1
Congential atresia	8	2	6
Stenosis small bowel	3	1	2
Hernia	6	2	4
Mesenteric thrombosis	4	0	4
Ileitis	2	2	0
Gallstone ileus	1	1	0
Leukemia	1	1	0
Total	198	122	76 (38.3%)

TABLE 2.—*Causes of Death*

Causes	No. of Patients
Peritonitis	42
(*a*) No operation	14
(*b*) Strangulation	11
(*c*) Breakdown of anastomosis	8
(*d*) "Closed loop" obstruction	4
(*e*) Simple obstruction with perforation	5
Carcinomatosis	10
Pulmonary embolus	5
Cerebrovascular accident	3
Pneumonia	3
Massive wound infection	2
Inanition (infants)	3
Overhydration (infants)	2
Spinal anesthesia	2
Hemorrhage	1
Tubercular meningitis	1
Perforation, peptic ulcer	1
Technical error	1

Small Intestinal Intubation.—Small intestinal intubation was attempted in 50 patients one or more times. Whenever intubation has been successful on one occasion, the tube has always been passed with ease in other trials. In 6 patients in whom attempts were made to pass the long tube, it functioned only as a means of gastric suction. Our failure cannot be charged against the use of this measure. Unsuccessful attempts to pass the long tube into the small intestine were made on 10 patients. In 7 of these the tube would not pass the pylorus; 2 patients did not tolerate the tube, and in 1 instance the tube would not pass the nares. Our rate of successful intubation was 68 per cent. In the hands of a skilled and devoted person with complete and enthusiastic assistance from the fluoroscopist, successful passage would be obtained in a much larger percentage of cases. In the occasional case with enormous distention in which quick passage of a long tube may be considered essential to recovery, one should consider the manual passage of the balloon through the pylorus into the jejunum by operative manipulation carried out with local anesthesia.[7]

Use of the Long Tube.—The complications associated with the use of the long tube are well known, but we wish to mention two serious complications that we have observed relative to its use. We have seen several patients in whom an efficient decompression of dilated small bowel gave the patient and his surgeon a sense of success. This was followed by perforation at the site of the primary lesion in the small bowel with the usual local reaction. In patients with mechanical obstruction successful decompression by the long tube should be considered a preliminary to operative treatment of the lesion. In 3 patients with obstructing lesions in the colon resulting in small bowel distention, decompression of the small bowel was successfully carried out with the Miller-Abbott tube but perforation happened in the colon despite the happy state of the small intestine. One was in the left colon at the site of neoplasm, one in the transverse colon and another through the appendix proximal to a cancer of the

5. Miller, T. G., and Abbott, W. O.: Ann. Int. Med. **8**: 85-92, 1934.
6. Abbott, W. O., and Johnston, C. G.: Surg., Gynec. & Obst. **68**: 691-697, 1938.
7. McIntyre, C. H.: Personal communication to the authors.

ascending colon. A closed loop was formed by the primary lesion and the ileocecal valve. One should emphasize that decompression from above by any type of tube does not usually decompress the colon and in any case of doubt as to the location of the lesion, if the colon is distended, an opening, cecostomy or colostomy, must be done in addition to the use of tube decompression of the small intestine. Cecostomy was used in the treatment of 35 of these patients in addition to tube decompression from above.

Enterostomy.—Enterostomy is now usually regarded as a procedure to be condemned and seldom utilized. Certainly if other methods of decompression are satisfactory, it should not be used. However, if a closed loop obstruction exists in the small bowel or if other measures fail, enterostomy may be the only decompressive measure available. In a small number of patients with long-standing obstruction from multiple obstructing points, it may be the treatment of choice. In justice to this procedure we mention its use on 15 patients. In 12 of them it functioned well and accomplished satisfactory decompression. None required operative closure. The incision in the abdominal wall through which the enterostomy is carried out is always infected. Ordinarily this is of small consequence, but in 2 patients the infection of the abdominal wall was serious and in 1 patient resulted in death. These complications occurred before the advent of antibiotics, and today the result might have been different.

IMPORTANCE OF EARLY DIAGNOSIS

It was clear to us on studying the cases briefly mentioned here that the earlier diagnosis of obstruction would result in better treatment and a lower mortality rate. The advances in the treatment of obstruction all relate to the management of features of the disease that develop late in its course. Early diagnosis depends entirely on proper evaluation of the history and physical examination. One must emphasize the supreme importance of a history of abdominal pain, its character and location. If the lesion is external, as in hernia, the

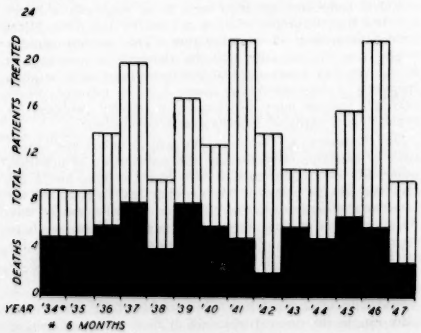

Fig. 1.—Graph showing deaths for the years 1934-1947.

diagnosis is clear. If the lesion is not visible, the history of pain should lead one to suspect the diagnosis with enough certainty to warrant operation. The differential diagnosis between simple obstruction and obstruction with strangulation may be difficult, but it is important since the mortality rate from untreated strangulation is exceedingly high. Shock from blood loss in the strangulated loop, tenderness, muscle spasm, a visible tender irreducible mass and leukocytosis all are suggestive of strangulation. Paracentesis in intra-abdominal strangulation will usually show bloody fluid after the process is four to six hours old. Generalized

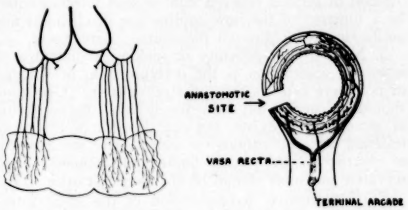

Fig. 2.—Drawing showing that collateral circulation in the small intestine stops with the terminal row of vascular arcades.

colicky pain without localization of an inflammatory process indicates obstruction. Vomiting will eventually occur with small bowel obstruction; it may never be present with large bowel obstruction. One should not wait for the cardinal signs of ileus before advising operation. If the patient is seen early, operation should be carried out immediately. At this time distention, dehydration, shock and infection are not yet evident. We have overemphasized the correction of these late effects of obstruction which would never happen if early diagnosis and operative treatment were carried out. In the late phases of the disease one must correct them before operation can be done. If there is a suspicion of strangulation, operation should be carried out immediately. In addition to the history and a physical examination, one must mention a third important aid in early diagnosis of obstruction, the scout roentgenogram of the abdomen.[8] The roentgenogram may make clear an early diagnosis of small bowel obstruction through depiction of the gas-filled loops; it frequently gives the location of the lesion and its probable nature and will indicate by the presence of free gas whether perforation has taken place from necrotic bowel due to strangulation. If it is not clear whether the obstruction is primary in the small or large bowel, it is permissible to give, with caution, a barium sulfate enema to determine the state of patency of the colon. When the disease is late in its course and a Miller-Abbott tube is in place near the obstructing point, the administration of a small amount of barium sulfate may aid one in determining more accurately the level and character of the obstructions.

COMMENT

It is not possible to refer to all of the errors and pitfalls noted in our diagnosis and management of patients with intestinal obstruction. It is apparent, however, from this study that the following deductions can be made:

1. Obstruction in the colon producing, in addition, small bowel obstruction carries the additional hazard of a "closed loop" colon obstruction. Its relief is not always possible with tube decompression. Cecostomy offers these patients decompression of the colon and supplements importantly decompression by tube from above.

8. Wangensteen, O. H.: Radiology **17**: 44-62, 1931. Solis-Cohen, L., and Levin, S.: Radiology **31**: 8-14, 1938. Ochsner, A.: Surg., Gynec. & Obst. **56**: 719-727, 1933.

2. The principal cause of death in these patients was peritonitis. The seriousness of this complication can be ameliorated to some degree by intensive antibiotic therapy. This is probably most important in patients with early peritonitis, particularly when intestinal resection and anastomosis are necessary. The prevention of serious or even fatal wound infections may be a function of the now routine use of chemical and antibiotic agents through the course of treatment.

3. Next to the difficulty of making a diagnosis of intestinal obstruction is the determination of whether or not there exists a state of strangulation. Operation should be carried out immediately when the suspicion of strangulation exists, but the dangers of error are lessened if the indications for conservative management of obstruction are strictly limited and defined. Conservative measures should be abandoned at once when:

(*a*) Progressive decompression of the small intestine is not satisfactory within thirty-six hours after commencement of effective suction. Operative manipulation of the tube may be considered.

(*b*) In the absence of a specific knowledge of the cause of the obstruction, temporary relief is attended by recurrence of the signs and symptoms of obstruction.

(*c*) The signs and symptoms suggest impairment of the bowel circulation or strangulation.

SUMMARY

The mortality rate for patients with mechanical obstruction of the small bowel is high. This is due largely to delay in diagnosis. The early diagnosis of the lesion can be made only by one's giving more attention to the history, physical examination and roentgen examination of patients with abdominal pain, nausea and vomiting. If a diagnosis is made at this time, operation should be performed. If the patient is seen later, when distention, dehydration and infection have supervened as a late stage of the disease, these complications must be combated in preparation for operation. Cure can be effected only by operative correction of the mechanical obstructing factor. Advances in our management of the complications of obstruction have tended to obscure this fact, and a reemphysis on the fundamentals of the clinical aspects of early recognition and prompt operative therapy will importantly and favorably affect the treatment of obstruction of the small bowel.

ABSTRACT OF DISCUSSION

Dr. R. J. Noer, Detroit: The reported mortality rate is higher than in most series, but this paper included only patients subjected to operation or who came to autopsy. There must have been many cases in which there was decompression by suction drainage or other means, and thus the patients recovered without operative procedure. Had these been included the mortality rate would have been lower. A few diagnostic points should be emphasized. At the Detroit Receiving Hospital, where we see much intestinal obstruction, we are impressed with the length of time the patient will suffer before seeking medical aid and with the number of physicians who fail to recognize the early signs and symptoms of intestinal obstruction. It should be emphasized that the so-called fecal vomiting is not essential to a diagnosis of intestinal obstruction. The reflex vomiting which occurs early before intestinal content reaches the stomach is just as important a sign of an obstructed intestine and will be more helpful in an early diagnosis. Constipation and obstipation are not at all essential to a diagnosis of intestinal obstruction. Many patients have bowel movements and even diarrhea in the presence of obstruction. To understand this one need only remember that the intestinal tract distal to an obstruction can still discharge its contents through the anus. A final diagnostic shortcoming is the failure of many persons to obtain scout roentgenograms of the abdomen. The importance of this has been emphasized by Wangensteen and others. Dr. Johnston has repeatedly said that the scout roentgenogram of the abdomen is the single laboratory technic of value in the diagnosis of intestinal obstruction. I do not agree with the authors' suggestion that operative enterostomy is a procedure to be used with any frequency. The most effective enterostomy is that carried out through the nose by means of a balloon-tipped intestinal tube. It should be emphasized, however, that the mere dropping of a tube into the patient's stomach is not adequate decompression. The tube must either be passed into the intestine or at least function as a duodenal suction tube if the patient is to be relieved of his distention.

Dr. Clarence Dennis, Minneapolis: I wish to express Dr. Wangensteen's regrets that he has been unable to be here. Dr. Buxton and Dr. Coller have courageously included in their statistics deaths from abdominal carcinomatosis in which small bowel obstruction has been only a factor. The figures my colleague and I have published specifically omit such cases. Several years ago it was my privilege to experiment in the laboratory on the safety of various types of anastomosis in the presence of previously established intestinal obstruction. Relief by side to side anastomosis was attended by a high mortality rate, an experience parallel to that of Owings and Smith at Johns Hopkins Hospital in the early 1930's. End to end oblique anastomosis was attended by no deaths, even in the absence of antibiotics, except in 1 case in which an obvious technical error had been made. Approximately 50 end to end anastomoses have been done in the relief of clinical obstruction. One suture line has leaked, and in that case gross peritoneal soiling occurred prior to laparotomy. With slight modification of the Wangensteen aseptic decompression method, it has been my personal experience that the bowel may be emptied without contamination at operation. As Wangensteen pointed out, the emptying of the bowel makes safe a direct attack on the obstructing mechanism, with resection and anastomosis if needed. Most of the patients have been sent home in less than two weeks, relieved and without need for further operation. There has been no spillage or catastrophe arising from the use of this method in the cases (about 20) with which I have had personal experience. This seems far safer and more practical than catheter enterostomy. My co-workers and I feel that the surgeon who treats a patient with ileac obstruction conservatively is shouldering a greater responsibility than he would if immediate operation were to be employed, although it is true that the proper selection of cases for this method does yield a lower over-all mortality rate. This seeming paradox arises from the necessity that the abdomen be examined at least every four hours and that roentgenograms must be made frequently if the conservative course is to be followed. Moreover, the surgeon must hold himself in constant readiness for exploration if signs of strangulation should appear.

Dr. Frederick A. Coller: We will all admit the importance of antibiotic chemotherapy, the maintenance of nutrition, water and electrolytic balance and decompression, but I am glad that all the essayists this morning have emphasized the importance of early diagnosis. There is no substitute for this. As an example of this, let me recite some analyses we have made recently in over 400 patients treated in our hospital for carcinoma of the colon. The study was made originally to find out whether certain technics we had been using were justified. We found that, of all of these patients, 40 per cent were beyond hope of surgical cure when we saw them. The mortality rate in the surgical treatment of those patients in whom the surgeon had a chance—that is, in whom the lesion was localized to the gut or to the adjacent lymph nodes—was very low, a little over 1 per cent. The mortality rate, however, for the disease itself in that other 40 per cent was high, and it seemed to us that we had been studying the wrong thing. That is, why fuss about whether one should do an open anastomosis or a closed anastomosis when the net result in favorable cases will give a mortality result of between 1 and 2 per cent. In the group of cases of small bowel mechanical obstruction which we presented this morning, we felt that it was only right in

studying the whole problem to present all of the patients we had seen, not the patients we had operated on but all we had seen. A considerable number of them were dying when we saw them. I am pleased that the importance of early diagnosis of acute abdominal lesions has been emphasized, since certainly that is most important. Many of us do not diagnose lesions of mechanical obstruction as well as we did twenty-five years ago. The knowledge that we have of methods for decompression and for the correction of dehydration, and of penicillin and streptomycin therapy with which to combat infection, retards diagnosis. I am very glad that Dr. Dennis and Dr. Noer emphasized the danger of conservative management. If there is mechanical obstruction in the small bowel, the ideal time to operate on the patient is before dehydration, before distention and before infection occur. The advice given by the surgeons of decades ago was that one should operate on diagnosis if complications do not exist. That is the optimal time to cure mechanical obstruction. Again, even though decompression is accomplished, it is much better, if the mechanical obstruction exists, to carry out operative correction of the mechanical defect as soon as the patient is in condition to withstand operation. I feel that, when one is in doubt concerning the patient seen early with generalized colicky pain, nausea and vomiting, even though one cannot make out the exact location of the obstruction, one should advise operation.

AN EVALUATION OF THERAPY IN INFANTILE ECZEMA

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In 1922 I wrote that with painstaking and intelligent care most cases of infantile eczema can be cured entirely. In 1934 I said that the treatment of eczema may be summarized in six words: "Find the cause and remove it." These statements were due to the optimism of youth. The condition in many cases cannot be cured entirely, and finding the cause does not happen as often as the books tell us.

In 1948 I say, "Infantile eczema is a perplexing and exasperating disease to treat, and I wish I understood it better."

When one is treating an infant with eczema one is dealing with a patient who is diligently and ingeniously working against him twenty-four hours a day; no skin can heal when it is continually rubbed and scratched. Another difficulty is that atopic dermatitis, which comprises about 75 per cent of "eczema" in the young, has as its basis an abnormality of constitution which cannot be changed.

Under the heading "infantile eczema" are included a number of different dermatoses. It is of the utmost importance to be able to determine into which group the eruption falls. It may be atopic, contact or seborrheic dermatitis, nummular eczema, an eczematized fungous infection or a low grade pyogenic infection. It may have nothing to do with allergy.

I suspect that many allergists do not pay enough attention to dermatology. It is as important for an allergist to be a reasonably competent dermatologist as it is for him to be an internist: he is continually dealing with the skin. A careful study of the morphologic aspects of the eruption, its distribution, the primary elements which compose it, the history, its gradual or sudden appearance, and particularly the part of the body on which it first appeared, is essential to a correct diagnosis. I shall discuss only the two eczematous dermatoses which rest on an allergic basis: atopic and contact dermatitis.

Read before the Section on Miscellaneous Topics in the Session on Allergy at the Ninety-Seventh Annual Session of the American Medical Association, Chicago, June 23, 1948.

USE OF CUTANEOUS TESTS

It is clear that many cases of infantile eczema develop on an atopic soil—that is, the infants give positive cutaneous reactions of the urticarial type and they and their parents frequently have asthma or hay fever. The tendency that their skins have in early life to eczema is a phase in the natural history of their allergic development and usually lasts about two years, but may, of course, last indefinitely. It was thought, when cutaneous tests were introduced, that they would solve the problem of infantile eczema. Unfortunately, there is more to it than this—the significance of cutaneous tests is not entirely understood, and, indeed, it has been said by some very competent and thoughtful allergists that the urticarial type of reaction to a cutaneous test has nothing to do with infantile eczema. This is surely often so, but I cannot agree that it is always so, because in my experience eczema can sometimes be relieved or even cured by removal from the diet or environment of allergens which give urticarial type reactions and made to recur with reexposure. This is the only valid proof of causation; the cutaneous reaction, particularly to tests with foods, means nothing by itself, except that at some time antigenic food protein has entered the circulation and an immunologic reaction has resulted. It is as natural a phenomenon for an atopic person to have positive reactions to cutaneous tests with foods as it is for a fish to have scales—it is part of his makeup. That is the way he reacts to absorbed food protein; it is a mark of his constitution, but comparatively few of these reactions have anything to do with his allergic symptoms.

"Tolerance" is mentioned a good deal, but not much is said about why there is clinical tolerance to a food in the presence of a positive reaction to a cutaneous test. The most reasonable explanation seems to me to be that the allergen when ingested does not reach the sensitized tissue, whether it be skin or bronchial mucous membrane, in sufficient amount to produce a reaction. I strongly suspect that in human allergy, as well as in animal anaphylaxis, the sensitizing dose of an antigen is much less than that required to produce a shock reaction in the sensitized tissue and that this may be why so many positive cutaneous reactions to foods are of no clinical importance. It has taken only an infinitesimal amount of absorbed food protein to produce cutaneous sensitization—it often takes more to produce a reaction in the sensitized tissue, and not enough is absorbed to do it. If the tissue sensitization is of very high degree, however, a reaction results from the absorption of only a very small amount of antigen, such as is commonly absorbed; if the tissue sensitization is not of high degree more antigen is required than is ever absorbed, and hence no reaction results. There is experimental evidence to support this conception, but it would take too long to discuss in a paper of this sort.

Some strange things are done in allergy. I have seen a 5 year old child who had been tested with 236 foods and had been found allergic to 109 of them. Her mother proudly presented a list of the 109 foods which did her harm, typed in red, and a list of the 127 which she could eat, typed in black.

Included among those which she must not eat were squab, calves' brain, venison, caviar, poppy seed, bay leaves, thyme, red currant and sanka® coffee. She was fortunately found not to be allergic to pheasant, turtle, artichoke, garlic, horse radish, tripe or caraway seed.

Another child of about the same age appeared one day with a little box of extracts in graduated dilutions obtained by her doctor from one of the large pharmaceutical houses in accordance with the skin tests he had made. The mother was giving an injection of this extract every day. On the bottom of the box was typed a list of the antigens the extract contained. This read as follows: beef, yeast, lactalbumin, lettuce, onion, broccoli, cat hair, dust, hazelnut, pecan, peach, fig, garlic, cattle hair, cotton seed and mixed feathers. Too much of this sort of thing goes on.

Infants with atopic dermatitis almost always give positive reactions to scratch tests with one or more foods. The commonest are egg, milk and wheat. Inasmuch as they eat no egg, egg has nothing to do directly in the causation of the eczema. In infants, pronounced positive reactions to scratch tests with milk and with wheat are usually indicative of causation; positive reactions to some of the other foods may or may not be. The only way to determine what foods are of importance is to remove them from the diet and see what happens, provided that there are not too many of them. If so many foods are involved that an adequate diet is not left, only those should be removed which elicit the greatest reactions, and no eczematous baby should ever have an inadequate diet no matter what his cutaneous reactions are.

REACTIONS TO MILK

Milk is of considerable importance. In most cases substitution of goat's milk for cow's milk is not of value, because there are so many crossed reactions between cow and goat lactalbumin. Of 44 eczematous infants who reacted to cow lactalbumin, 25 gave identical reactions to goat lactalbumin. It is a curious fact, however, that while goat's milk is rarely of value in infantile eczema, it is practically always tolerated by infants, usually without eczema, who have violent symptoms from even a few drops of cow's milk. Many of these patients, in spite of extreme clinical sensitivity, give negative reactions to cutaneous tests with milk, and I suspect that their immunology may be somewhat different from that in infantile eczema. It is better in eczema, if sensitivity to milk exists, to use a milk-free food, of which sobee,® mull soy® and nutramigen® are the most popular. These foods have a real but limited place in the treatment of infantile eczema, but are being grossly misused. The doctor sees a rash on the baby, which may be of almost any origin, and immediately prescribes a milk-free food. These should be used only when there is a positive cutaneous reaction to a test with milk.

DIFFICULTIES IN DIAGNOSIS

I think that it is fair to say that manipulation of the diet in accordance with the results of skin tests often does good. This is not very consistent, however, and there are plenty of cases in which it seems to make little difference what the diet is, in spite of positive reactions to various foods. The plain truth is that there is at present no really satisfactory treatment for the disease atopic dermatitis in the infant, child or adult—and it is a disease, as much as pernicious anemia is a disease. Many cases of infantile eczema have nothing to do with the diet. I repeat this and say again that many cases of infantile eczema have nothing to do with the diet, for the idea is firmly implanted in the minds of most of those who deal with infants that almost any cutaneous eruption arises from food. Infants have contact dermatitis, just as adults do, and it is not uncommon. If the dermatitis begins rather suddenly after the age of 6 months, particularly if it begins on the trunk or extremities, there is a rather good chance that it may be contact dermatitis. I have seen this in infants from the sizing in a new unlaundered undershirt, from the dye in a pink sweater, from medicated baby oil, from aristol® powder (thymol iodide), from hypochlorite bleaching powder, from the rubber waist band of a patent diaper and from furniture polish. The location of the initial dermatitis may furnish the clue to the cause, but it must be remembered that contact dermatitis may spread far from the original contact. In many cases, although one can be sure that the eruption is of the contact variety, it is not possible to determine the exact cause. Patch tests may occasionally be of value: more often not. In contact dermatitis, even though the exact cause is not found, one may likely obtain good therapeutic results by allowing nothing to come in contact with the skin except clean white cotton and whatever local medication is used.

Atopic dermatitis is a disease; contact dermatitis is an episode.

The dermatologist, in all cutaneous conditions, is immensely concerned with local treatment: the allergist as a rule does not pay enough attention to it. It must be realized that the immunologic approach to infantile eczema is far from perfect and that skilled local treatment often does more good than an immunologic approach. The two fundamental necessities are to use the right kind of salve or lotion for the right kind of dermatitis and to protect the involved areas from any and all trauma in so far as is possible. About half of what one sees on the skin in infantile eczema is what the infant does to himself. Results of local treatment on the arms and legs are almost always satisfactory, because they can be bandaged. A piece of soft cotton cloth is applied over whatever ointment is being used, then a 2 inch (5 cm.) ace® bandage. This efficiently protects the skin: it is too thick to scratch through. This is a simple measure, but may do more good to your patient than anything else.

I know of no really good way to stop itching; there are disadvantages to all the usual antipruritics, and tripelennamine hydrochloride (pyribenzamine®) and diphenhydramine hydrochloride (benadryl®) given internally have in my hands been useless. I have not as yet had enough experience with the use of pyribenzamine® ointment locally, as suggested by Dr. Feinberg, to say anything about it that would be valid.

There have been numerous other special treatments recommended for infantile eczema, which have proved of little or no value. A possible exception to this is the ingestion of unsaturated fatty acids in the form of linseed oil, corn oil or lard, as originally recommended by Hansen.[1] Although this treatment has been in use for fourteen years, there is still no unanimity of opinion

1. Hansen, E.: Possible Mechanism of Crude Coal Tar Therapy in Infantile Eczema, Proc. Soc. Exper. Biol. & Med. **31**: 161 (Nov.) 1933.

concerning it. Hansen[2] and his co-workers in 1947, however, reported a large and very carefully studied series of cases and stated that they were convinced that unsaturated fatty acid therapy is a very useful adjunct to treatment. This treatment can do no possible harm to the child, which is more than can be said of some treatments that have been recommended, and, moreover, its proponents (Hansen, McQuarrie and Stoesser) are sound and conservative pediatricians of the highest reputation. I cannot honestly say that I have myself seen it do much, but perhaps I became too easily discouraged with it and did not give it a fair trial. It should be used by everyone in the treatment of infantile eczema, and in the course of time opinion concerning it will be crystallized, for a new treatment of any disease, in order to become finally standard, must be efficacious in the hands of every one as well as in the hands of its originators.

SUMMARY

I wish especially to emphasize four things: (1) the need for a common sense point of view concerning cutaneous tests with foods, (2) the need for more attention by allergists to local treatment, (3) the necessity of protecting the skin from external trauma and (4) the fact that not all eczema in infants has to do with the diet and that contact dermatitis is not uncommon.

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ABSTRACT OF DISCUSSION

DR. A. V. STOESSER, Minneapolis: Dr. Hill may have forgotten that he also published a good paper in 1933 in the *Journal of Pediatrics*. We, at Minnesota, read this article and set up a program to take care of the patients with infantile eczema coming to the University Hospital. At first, we were very happy with our results, but, as the number of cases increased, some things being done did not work out so well. We followed Dr. Hill's recommendation closely, although we were discouraged at times. Now I find that he has adopted a broader point of view. In other words, as a teacher he is beginning to see that there are a number of things one can do for eczema and that emphasis should not be placed on any one thing. The practitioner should not get into the habit of thinking of a certain food in the diet as the only cause of infantile eczema or of believing that contact with something is the cause of the disease. Over and over again, the emphasis has been placed on only one phase of therapy. The diet may or may not play a part. Secondly, contact is significant. When the child begins to walk, he may have dermatitis on his arms and legs. This may be from the living room rug or the overstuffed furniture. The avoidance of these contacts will sometimes terminate the eczema in a short period. Thirdly, there is the matter of medication. There is always the desire to grease the children, put oil on them and use ointments. Why not water? Why not hypoallergic soaps and creams? They give comfort to infants. Fourth, sedation is important. Dr. Hill does not think much of the antihistaminic drugs. I do, but not for their specific action. They are good sedatives and the best is still diphenhydramine hydrochloride (benadryl®). Finally, there is the question of adjuncts. Physicians come to us and say that they have taken good care of children by using thyroid extract. The same applies to the unsaturated fatty acids. Dr. Hill mentioned that he did not know whether this type of therapy would work out in many cases. The missing link in this treatment is the determination of the blood lipids, a difficult procedure. If the physician had that information he could do better with those infants who required the unsaturated fatty acids.

2. Hansen, E.; Knott, E. M.; Wiese, H. F.; Shapesman, E., and McQuarrie, I.: Eczema and Essential Fatty Acids, Am. J. Dis. Child. 73:1 (Jan.) 1947.

THE TREATMENT OF THYROTOXICOSIS

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Within the past few years a number of important advances have been made in our knowledge of the normal and abnormal functioning of the thyroid gland. These advances have resulted in part from the introduction of new methods for the treatment of thyrotoxicosis. It would seem desirable at this time to reexamine the present methods of treating thyrotoxicosis with special consideration of the status of thyroidectomy.

The most important recent advances in the knowledge of thyroid physiology have resulted from the use of three major tools: (1) a large group of goitrogenic compounds, varying considerably in chemical structure and mode of action (sulfonamide compounds, thiourea derivatives, sulfocyanates); (2) radioactive iodine and (3) relatively purified preparations of the thyrotropic hormone of the anterior pituitary. From the integrated use of these tools much has been learned concerning the mode of transport of inorganic iodine to the thyroid; the mechanism of its entrapment, fixation and subsequent incorporation into the thyroid hormone; the mechanism of the release of the thyroid hormone into the circulation; the effect on this release of a variety of extrathyroidal factors, and the control exercised by the anterior pituitary on these various functions. There remains much, however, of which we are still ignorant. We do not know, for example, the structure of the thyroid hormone, nor do we know the site or mode of action responsible for its specific metabolic effect on the target tissue cell. Knowledge of the etiologic aspects of simple nontoxic diffuse goiter is probably still incomplete. Finally, we are still ignorant concerning the primary cause of thyrotoxicosis.

With the possible exception of the true toxic adenoma, it seems probable that the primary cause of thyrotoxicosis lies outside the thyroid gland itself. Certain clinical evidence suggests the possible etiologic importance of functional disturbances in the higher psychic centers, the hypothalamus, the anterior pituitary, the autonomic nervous system, the gonads and the adrenals. Proof of such relationship, however, is still lacking. The thyrotoxic state might be considered theoretically to be therapeutically vulnerable at three possible levels: (1) by an attack on the initiating factors, (2) at the thyroid itself or (3) at the level of the peripheral target tissue cell where the impact of the excessive output of thyroid hormone is exerted. We have no methods of attack at the causative level, with two or three possible exceptions: psychotherapy, irradiation of the anterior pituitary and excision of true toxic adenomas. Likewise, we are unable to counteract the peripheral tissue cell effect of the thyroid hormone. The principal approach at present, therefore, remains at the thyroid level. Present methods of treatment of thyrotoxicosis have a common objective: a reduction in the output of thyroid hormone of such magnitude and duration as to produce a permanent

From the Surgical Clinic and the Endocrine Section of the Medical Clinic of the Hospital of the University of Pennsylvania, Philadelphia.
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remission in the objective and subjective manifestations of the disease.

Those methods of treatment which require consideration may be listed as follows: (1) iodine therapy, (2) treatment with goitrogenic compounds, (3) external irradiation of the thyroid or pituitary, (4) radioactive iodine therapy and (5) radical resection of the thyroid gland.

IODINE

Iodine in any absorbable form will produce a variable degree of remission in at least 95 per cent of thyrotoxic patients. Its exact mode of action in accomplishing the remission is as yet largely obscure. Since such remissions are usually incomplete, the usefulness of iodine is limited largely to situations in which only a short remission is desired, i. e., in preparation for thyroidectomy. In the Endocrine Clinic of the Hospital of the University of Pennsylvania we have observed a small group of patients in whom the response to iodine was unusually prompt and complete, the basal metabolic rate often falling to subnormal levels within a few days. In this group the severity of the disease is usually mild to very moderate, and some of the patients exhibit evidence of the hyperophthalmopathic type of Graves' disease.[1] Even then the response is difficult to predict. The remissions so induced may be prolonged or permanent, but the group of patients responding thus to iodine is small, not more than 5 per cent of all patients with thyrotoxicosis. These patients frequently have a major psychogenic initiating or contributory factor. The motive force having been removed or brought under control, the symptoms of hyperthyroidism may be decidedly reduced or disappear altogether. The use of iodine should, in general, be limited to (1) preoperative preparation, (2) treatment of the "thyroid storm," (3) temporary postoperative administration, (4) occasionally as a therapeutic test when the diagnosis of thyrotoxicosis is in doubt and (5) certain cases of hyperophthalmopathic Graves' disease.

GOITROGENIC COMPOUNDS

The goitrogenic compounds now being used produce a remission in the thyrotoxic state by inhibiting the synthesis of thyroid hormone. They do not affect the thyroid hormone already active in the body. Although their administration alleviates the symptoms of toxicity, the glands of patients receiving these drugs remain hyperplastic and show the typical histologic features found in untreated thyrotoxic patients. More than a score of goitrogenic substances have received clinical trial. While several (6-methyl thiouracil, thiourea [2]) are currently employed in certain clinics, 6-propyl-2-thiouracil [3] is the most widely used. The consistency and rapidity with which this drug produces remissions vary widely and may be influenced by the type of goiter and by previous treatment. Thus, patients with large or nodular goiters or those recently treated with iodine may be slow to respond. Some patients are partially or completely refractory without apparent reason. We have seen this in approximately 5 per cent of our patients.[4] The earlier hopes that these compounds might prove to be highly satisfactory agents for the permanent relief of thyrotoxicosis have not been fully realized. The present consensus indicates that sustained remissions following prolonged therapy (six to twelve months) cannot be expected in more than about 50 per cent of cases.[5] Our experience suggests that the majority of patients showing a sustained remission and a return to normal activities have exhibited the milder forms of thyrotoxicosis, with minimal goiter, slight to moderate elevation of basal metabolic rate and no cardiac or other visceral complications. Prolonged treatment with propylthiouracil, with the hope of producing a permanent remission, may be considered justifiable in such mild forms of thyrotoxicosis, as well as in children with toxic diffuse goiter of mild to moderate severity. Compounds of this type have also been administered prior to the use of radioactive iodine.[6]

These goitrogenic substances have proved useful in the prolonged control of certain thyrotoxic patients in whom thyroidectomy cannot, for various reasons, be undertaken even though theoretically the treatment of choice. This group includes certain older patients, those who refuse operation and those who cannot be brought by medical therapy to a point where operation can be considered justifiably safe. Admittedly they are few in number. We have in the past five years treated 15 patients of this type with maintenance doses of thiouracil, or propylthiouracil, for periods ranging from six to forty-eight months with satisfactory results, even though we cannot anticipate a sustained remission should treatment be withdrawn.

Although most patients can be satisfactorily prepared for thyroidectomy by the use of iodine, it has proved inadequate in two important groups of cases: (1) certain severely toxic patients in whom iodine alone fails to produce a satisfactory preoperative remission and (2) patients rendered "iodine-fast" by the prolonged use of this substance. In such patients a complete remission can usually be produced by the prolonged use of goitrogenic agents. Operative morbidity and mortality are thereby reduced. Thiouracil compounds have also been employed in the treatment of thyroid crisis [7] and in conjunction with tracer doses of radioactive iodine for diagnosis in doubtful cases.[8]

The most recent report on the use of goitrogenic compounds and iodine in the treatment of thyrotoxicosis is that of Danowski and his co-workers.[2] They treated 118 patients with thiourea and strong solution of iodine over a long period. Of these, 3 died during the course of treatment. They stated, "The additive effects of thiourea and iodine solution have been amply demonstrated in control studies and may be attributed to the capacity of the iodine to act directly on the thyroid gland, inducing a resting phase, and at the same time blocking thyrotropic hormone which increases thyroid activity." The mortality rate in the series must be considered as

1. Hertz, S., and Means, J. H.: Prognostic Criteria in the Selection of Cases of Exophthalmic Goiter for Nonsurgical Treatment, Tr. Am. A. Study Goiter, 1937, p. 140.

2. Danowski, T. S.; Man, E. B.; Elkinton, J. R.; Peters, J. P., and Winkler, A. W.: Results of Prolonged Medical Treatment of Hyperthyroidism with Thiourea, Am. J. M. Sc. **215**: 123-129, 1948.

3. McCullagh, E. P. Hibbs, R. E., and Schneider, R. W.: Propylthiouracil in the Treatment of Hyperthyroidism, Am. J. M. Sc. **214**: 545-552, 1947.

4. Rose, E., and McConnell, J. S.: Treatment of Thyrotoxicosis with Goitrogenic Compounds, Tr. Am. Clin. & Climatol. A. **59**:91-109, 1947.

5. Beierwaltes, W. H., and Sturgis, C. G.: Remissions in Thyrotoxicosis After Discontinuing Thiouracil, J. A. M. A. **131**: 735-738 (June 29) 1946. Williams, R. H.; Asper, S. P.; Rogers, W. F.; Myers, J. D., and Lloyd, C. W.: Persistence of Remissions of Thyrotoxicosis After Cessation of Thiouracil Therapy, New England J. Med. **236**: 737-741, 1947. Rose, E., and McConnell, J. S.: Thiouracil in Thyrotoxicosis: Results of Prolonged Treatment in Thirty-Five Cases, Am. J. M. Sc. **213**: 74-80, 1947.

6. Williams, R. H.: Antithyroid Drugs. III. Comparison of Results of Newer Forms of Treatment of Thyrotoxicosis, Arch. Int. Med. **80**: 11-36 (July) 1947.

7. McArthur, J. W.; Rawson, R. W.; Means, J. H., and Cope, O.: Thyrotoxic Crisis: An Analysis of the Thirty-Six Cases Seen at the Massachusetts General Hospital During the Past Twenty-Five Years, J. A. M. A. **134**: 868-874 (July 5) 1947.

8. Stanley, M. M., and Astwood, E. B.: The Accumulation of Radioactive Iodine by the Thyroid Gland in Normal and Thyrotoxic Subjects and the Effect of Thiocyanate on Its Discharge, Endocrinology **42**: 107-123, 1948.

2.5 per cent if it is to be compared with the mortality rate in the 655 cases we are reporting following thyroidectomy.

EXTERNAL IRRADIATION OF THE THYROID OR PITUITARY

External irradiation of the thyroid, long the subject of controversy, has been largely abandoned since the introduction of goitrogenic compounds and radioactive iodine. Irradiation of the pituitary has received a limited trial.[9] Its usefulness at present would appear to be restricted to certain patients with the hyperophthalmopathic syndrome of toxic diffuse goiter (Graves's disease).[10] In these patients thyrotoxic phenomena are frequently mild and may be at times entirely absent or replaced by evidence of hypothyroidism. Ocular signs and symptoms dominate the clinical picture and may include varying degrees of proptosis, periorbital and palpebral edema and pigmentation, edema and congestion of the conjunctiva, keratitis, lacrimation and swelling of the lacrimal glands, fixation of the eyeball, pseudohypertrophy of the extraocular muscles, papilledema or optic neuritis, and edema or infiltration of the orbital tissues. This ophthalmopathic syndrome occasionally develops rapidly and unexpectedly after thyroidectomy in patients with minimal preoperative ocular signs, but its presence can usually be suspected by one or more of the aforementioned manifestations. Too great a suppression of thyroid function in such cases, whether by thyroidectomy or any other means, may be followed by disastrous progression of the ocular changes. The pathogenic mechanism of these changes is still obscure, but some kind of abnormal effect is believed to be exerted by the anterior pituitary on the extraocular muscles and the orbital tissues. Suppression of thyroid function appears to aggravate the ocular disturbance by removing an inhibitory effect on the anterior pituitary. In the presence of pronounced ocular symptoms and a mild thyrotoxic state, thyroidectomy is, in our opinion, contraindicated. Therapy should be aimed at inhibition of anterior pituitary activity and has included such measures as desiccated thyroid, estrogenic substances and the intermittent use of iodine. Irradiation of the pituitary, while far from being precisely controllable in its placement, or in the exact amount delivered to the pituitary, nevertheless appears justifiable in severely progressive cases. We have employed it, along with other measures, in 10 patients of this type without obviously harmful effect. In none of these patients was there continued progression of the ocular syndrome, which remained unchanged in 6 and showed varying degrees of regression in 4 instances. Improvement in the latter cannot, of course, be attributed with certainty to the irradiation in view of the other measures employed and the possibility of spontaneous remission.

RADIOACTIVE IODINE

Although radioactive iodine was used in the treatment of thyrotoxicosis as early as 1941, the first detailed reports concerning it did not appear until five years later.[11] The larger experience with it has been acquired during the past three or four years. The number of patients treated is still comparatively small, and the time available for follow-up has been limited. These restrictions prevent adequate evaluation of this substance at present. While it must be regarded as a promising new tool in the treatment of thyrotoxicosis, much greater experience will be required before its usefulness can be finally determined.

Its use has been limited chiefly to selected cases, most of them of either toxic diffuse goiter (Graves' disease) or recurrent postoperative thyrotoxicosis. Few patients with toxic nodular goiter appear to have been treated. The radioactive isotope I^{131} with a half-life of eight days, administered orally, with or without a small carrier dose of stable iodine, is now most generally employed. Total dosage and frequency of administration have varied widely in different clinics. The preparation, transportation, handling and administration of the material require specially trained personnel, rather elaborate safety precautions and moderately expensive physical equipment. Its effective use is therefore limited at present to a relatively few clinics.

The toxic thyroid will usually take up at least 40 per cent of an oral dose of radioactive iodine if its avidity for iodine has not been impaired by recent therapy. Internal irradiation by the gamma rays then results in a gradual reduction of the activity of the toxic thyroid, although this may be preceded by a temporary exacerbation of the disease. Remission may be complete in from one week to six months or longer. The incidence of satisfactory end results appears at present to be somewhere between 70 and 80 per cent, but it should be remembered that most of the reported series have consisted of selected cases. Myxedema with fibrosis of the thyroid may occur, and the ocular complications are occasionally aggravated. Radiation tracheitis and esophagitis may occur. Late carcinogenic effect on the thyroid and damage to the urinary tract during excretion are possible dangers which cannot at present be evaluated. These possibilities should not be underestimated.

THYROIDECTOMY

Principles of Preoperative Care.—The basic principles of preoperative care of patients with hyperthyroidism are the same, regardless of the type of the disease. The patient should be placed on a program which will tend to: (1) bring the basal metabolic rate to normal, (2) improve the general nutrition as demonstrated by a gain in weight and an improvement in the general physical condition, (3) lead to a stabilization of the pulse rate and (4) finally, but not the least important, restore the patient's confidence in ultimate recovery.

Reduction of the Metabolic Rate: Because the administration of propylthiouracil alone results in a very soft, friable and highly vascular gland, which makes operation more difficult and postoperative oozing more frequent, we have during the past three years used it in conjunction with iodine in preparing the thyrotoxic patient for operation. In the severely toxic patient propylthiouracil is administered in amounts varying from 150 to 300 mg. per day, until the metabolic rate begins to approach normal. Ten days to two weeks before operation is planned, treatment with iodine is begun in the form of potassium iodide (10 drops of a saturated solution, three times a day). The metabolic rate is thus brought to normal or to within safe limits, the major symptoms of the disease are brought under control and the gland at operation is relatively avascular, firm and easy to excise and to suture.

9. Borak, J.: Treatment of Hyperthyroidism by Roentgen Irradiation of Pituitary Gland, Radiology **24**: 535-549, 1935.
10. Means, J. H.: Hyperophthalmopathic Graves' Disease, Ann. Int. Med. **23**: 779-789, 1945.
11. Hertz, S., and Roberts, A.: Radioactive Iodine in Study of Thyroid Physiology: Use of Radioactive Iodine Therapy in Hyperthyroidism, J. A. M. A. **131**: 81-86 (May 11) 1946. Chapman, E. M., and Evans, R. D.: Treatment of Hyperthyroidism with Radioactive Iodine, J. A. M. A. **131**: 86-91 (May 11) 1946.

Nutrition: Thyrotoxicosis of any type results in an increase in metabolism. As long as food intake exceeds energy requirements, weight loss does not take place. Sooner or later, as the result of a number of factors, the patients lose weight. As the complex nutritional deficiency, from which many of these patients suffer, becomes severe, the symptoms of hyperthyroidism may become exaggerated.

During the preoperative period the patient's nutritional program therefore receives the most careful supervision. Thiamine hydrochloride in amounts of 50 to 200 mg. daily is given in addition to riboflavin, 45.0 mg., and nicotinamide, 75.0 mg., daily. We also find it useful to give additional vitamin B in the form of a potent yeast concentrate. As the vitamin B deficiency is overcome and as the metabolic rate declines, appetite usually returns and the weight increases.

A highly nutritious diet is provided, consisting of 3,000 to 5,000 calories a day. Provided that the protein is a complete protein and adequate in amount, 25 to 35 per cent of the total calories consumed, there is every reason to expect [12] that any existing fatty infiltration at the time of initiation of the dietary program will resolve itself and thus provide a liver less susceptible to the assault of anesthesia and operation. Interval feedings or even tube feedings may be necessary.

The important thing is that the patient eat an amount sufficient to meet energy requirements and have left a modicum for restoration of the depleted body tissues. The criteria of achievement of this objective are a gain in body weight in the absence of edema and an improvement in general muscular tone. The myasthenia frequently seen in thyrotoxicosis may result from two factors—the muscular wasting of hypermetabolism and that associated with the nutritional deficiency per se.

We are convinced that an over-all improvement in the nutritional state is one of the most important objectives of the period of preparation for operation.

Stabilization of the Pulse Rate: Numerous authors have called attention to the desirability of achieving cardiovascular stability prior to operation. Even though the rate may remain above normal, a diurnal uniformity of rate is desirable and should be regarded as one of the major objectives of the preoperative preparation. It usually occurs along with a reduction of the metabolic rate and with improvement in the nutritional state of the patient.

It is facilitated by mild sedation during the preoperative period and by optimal hospital environment. A nervous frightened patient presents an increased operative risk.

Psychiatric Therapy: The collaboration of a psychiatrist is usually unnecessary in the preoperative preparation of these patients. The surgical staff should assist in this phase of therapy. The staff must be thoroughly conscious of the psychogenic factors that played a part in the initiation or extension of the disease and of the fears that beset these patients. They must attempt to emulate the approach of the psychiatrist. Here again the medical, surgical and nursing staff play an important part in restoring the patient to an emotional state which makes operation safer and the postoperative persistence or recurrence of symptoms less likely.

12. Goldschmidt, S.; Vars, H. M., and Ravdin, I. S.: The Influence of the Foodstuffs upon the Susceptibility of the Liver to Injury by Chloroform and the Probable Mechanism of Their Action, J. Clin. Investigation **18**: 277-289, 1939.

Anesthesia and Operation.—When the objectives of the preoperative period have been achieved, the operation should be done. In the patients who were severely toxic when first seen and in those who are still easily frightened we employ the method of "stealing the thyroid," the efficacy of which was early advocated by the late George W. Crile. On the morning of operation the house officer who has most actively participated in the care of the patient administers thiopental sodium (pentothal® sodium) intravenously. The patient, thinking that only another test is being made, goes to sleep unaware that within a few moments the operation will proceed. The attendant fear and psychic shock of anesthesia and operation is overcome.

Inhalation anesthesia is then administered. The specific anesthetic employed is less important than the prevention of anoxia. Some anesthetic agents, such as cyclopropane, may affect cardiac activity; others, such as ether or ethylene, may affect the liver, but these risks may be accepted as long as anoxia is avoided. Under conditions of anoxia, cardiac integrity may suffer, liver injury become further accentuated and a preexisting renal injury become worse.

To facilitate the anesthetist's control of the situation, tracheal intubation may be done prior to operation. It is a valuable safeguard often overlooked. Perfect anesthesia and a competent airway often are as important as the technical aspects of the operation.

Every possible care must be exercised not to injure the recurrent laryngeal nerves. The suggestion of Lahey [13] that the recurrent laryngeal nerves be exposed at every thyroidectomy will, if carefully followed, reduce the number of injuries. While we do not do this routinely, we do it often enough to feel sure that this procedure is a valuable addition to the technic of thyroid surgery. Even exposure does not prevent injury unless constant care is exercised throughout the operation. The injudicious application of a hemostat into a pool of blood or the passage of a suture into the tracheothyroid space may result in temporary or permanent injury in spite of previous visualization.

No thyroid resection should be attempted without prior identification of parathyroid tissue. These glands vary in number and in position even in normal persons. Their location may be further distorted by enlargement of the thyroid.

The thyroid isthmus should be divided and the trachea exposed. Although a tracheotomy is seldom necessary, it may occasionally be required as the result of tracheal collapse. Furthermore, sparing the isthmus and pyramidal lobe results in a higher incidence of persistence of hyperthyroidism. A radical resection of both lobes of the thyroid should be accomplished in every instance if a high incidence of permanent cures is to be expected. It is far better to remove too much than too little, for the hypothyroid state, which may follow a very radical thyroidectomy is far better and more easy of control than is persistent hyperthyroidism.

Even in the adenomatous goiter with hyperthyroidism and in instances of apathetic hyperthyroidism, maximal subtotal thyroidectomy is preferable. It is rarely necessary now that the operation be done in stages.

There are several technical factors which must be considered during the operation. They can be summarized as follows. The gland should be adequately exposed, if necessary, by division of the prethyroid

13. Lahey, F. H.: Presentation of Henry Jacob Bigelow Gold Medal, with Introductory Remarks, New England J. Med. **236**: 45, 1947.

muscles. Mass ligation of the superior poles is undesirable. It leaves thyroid tissue in amounts that cannot always be assessed, and it results in injury to the superior laryngeal nerve, thus predisposing to excessive mucous secretion in the trachea.

Postoperative Sequelae and Treatment.—Crisis is the most dreaded of the postoperative sequelae. It is now so infrequent that younger surgeons rarely see this complication and may therefore underestimate its importance. Perfect anesthesia reduces the risk of a severe reaction. The intravenous use of dextrose during and after operation, as suggested by the late Charles H. Frazier,[14] assists in reducing its incidence and severity, and the use of adequate amounts of blood, when necessary, is of further help.

When crisis occurs, as it did in 3 of our cases, therapy should be begun at once. The blood volume must be maintained, dextrose and iodine given intravenously and attention directed to any specific electrolyte imbalance. Large amounts of sodium salts should not be administered if the imbalance is one chiefly associated with potassium disturbance, and neither should be administered without careful study if renal function is impaired.

Adequate sedation, oxygen therapy, cardiac support when indicated and the use of some method of refrigeration in the presence of pronounced hyperpyrexia are all of value. Adequate doses of all components of the vitamin B complex should be given, parenterally, when necessary. Propylthiouracil may also be of assistance.

Tetany: Acute traumatic parathyroid insufficiency, while rarely fatal, may be an important cause of postoperative morbidity. Its treatment is too well standardized to require comment here. In many cases the insufficiency is self limited, and spontaneous readjustment may occur up to six months after injury. Recognition of the early symptoms is important. Such symptoms may include vague nervousness and apprehension, insomnia, paresthesias of the face or extremities and minor twitching of skeletal muscles. Immediate reimplantation into the ribbon muscles of the neck of any tissue excised at operation which resembles the parathyroid may prevent postoperative hypoparathyroidism.

ANALYSIS OF CASES

Number of Cases.—We wish now to report on 655 thyrotoxic patients operated on in the ten year period prior to June 1947.

The mean age of the entire group was 40.6 years. Of the total, 145 (22.2 per cent) were male and 510 (77.8 per cent) were female. Four hundred and fifty-two (69 per cent) of the patients had diffuse toxic goiter and 203 (31 per cent) toxic nodular goiter. There was associated pathologic evidence of chronic thyroiditis in 19 of the patients and a single instance of carcinoma (0.15 per cent). This is a much lower incidence of malignancy than that reported by most other writers.

There were 82 patients (12.5 per cent) with serious heart disease. Twelve of the patients were admitted to the hospital in cardiac decompensation. Forty had fibrillation and 4 auricular flutter. Forty were decidedly hypertensive. Twenty-four had true diabetes mellitus and 6 active pulmonary tuberculosis. Seven had syphilis which required therapy, and 3 were pregnant. The average period of preoperative iodine administration while in the hospital was 12.3 days. Many had received it for a variable period prior to admission. The mean period of days of thiouracil therapy was 37.2 days, of aminothiazole 17.5 days and of propylthiouracil 67.8 days.

The exact type of preoperative therapy prior to admission often could not be determined with certainty, but nearly one half of the patients had received iodine before hospitalization, and 20 had had long periods of radiation therapy.

The patients with diffuse toxic goiter showed a mean basal metabolism rate of plus 42 per cent, and those with toxic nodular goiter of plus 58 per cent.

One hundred of the patients were operated on with local anesthesia alone. In this group there was 1 death (1 per cent). Twenty-six received tribromoethanol solution (avertin®) and local anesthesia with 2 deaths (7.7 per cent), and 529 had received one or another type of inhalation anesthesia with or without local anesthesia. In the latter group there were 3 deaths (0.57 per cent). The over-all mortality rate was 0.9 per cent.

Twenty patients who had not shown fibrillation prior to operation did so subsequently, and in another pericarditis developed. There were 3 instances of true crisis (0.46 per cent). No patient died in crisis subsequent to the use of iodine plus thiouracil or propylthiouracil in the preoperative period.[1]

Of the 6 deaths, the cause of death was recorded as follows:

1. Cardiac arrest at operation, cerebral anoxia, error in anesthesia management.
2. Cardiac decompensation, two days after operation.
3. Cardiac decompensation, twenty-six days following thyroidectomy.
4. Sudden cardiac failure. The autopsy report was postoperative "cardiogenic" shock. Microscopic examination of the tissues failed to reveal any further information as to the cause of death.
5. True post-thyroidectomy storm.
6. Staphylococcus septicemia with multiple visceral abscesses. Death occurred twenty days after operation.

Twenty-three patients (3.5 per cent) had postoperative impairment of the motion of one vocal cord. Of these 23 patients, 20 recovered completely. The incidence of permanent cord injury in the series of 655 patients was therefore 0.46 per cent. Two patients showed evidence of hypoparathyroidism.

All thyrotoxic patients are requested to return to the follow-up clinic at regular intervals after operation. If this is not possible, follow-up reports are obtained from the referring physician. The average duration of follow-up for the entire living group has been 2.7 years.

The average basal metabolic rate for the entire group at the last follow-up visit was plus 3.7 per cent. Fifteen patients (2.3 per cent) had recurrent thyrotoxicosis.

COMMENT

Our experience, therefore, indicates that the thyrotoxic patient may be treated surgically with an operative mortality risk of less than 1 per cent and with less than 4 per cent risk of recurrence of the disease. There are, to be sure, other immediate and late postoperative complications to be reckoned with, but they are, in

14. Frazier, C. H., and North, J. P.: Carbohydrate Metabolism in Hyperthyroidism: Continuation Study, Tr. Am. A. Study Goiter, 1933, p. 203.

general, not formidable. It should be emphasized, however, that all phenomena of thyrotoxicosis do not by any means disappear when a euthyroid level of metabolism is attained. Many patients classified in follow-up reports as showing good results retain certain stigmas of their disease (exophthalmos, tremor, fatigue, nervousness, vasomotor instability) even though they are economically rehabilitated.

Thyroidectomy is too often incorrectly regarded as an end point in the clinical history of the thyrotoxic patient. The fallacy of this point of view is amply attested by the frequency with which residual symptoms persist indefinitely and by the occurrence of relapses as long as twenty years after operation. Thyroidectomy should be regarded as a therapeutic incident, albeit a major and usually successful one, in the natural history of thyrotoxicosis. Patients should be inspected periodically for at least five years after operation and requested to report their condition by letter at intervals of one to two years thereafter.

In spite of its empiric nature, its hazards and its limitations, we believe that subtotal thyroidectomy when expertly performed after optimal preoperative preparation remains the most effective method presently available for the production of permanent remission of thyrotoxicosis in unselected cases.

SUMMARY AND CONCLUSIONS

The various forms of treatment now available for the control of thyrotoxicosis are reviewed. The present status of thyroidectomy has been examined with particular reference to our experience in the operative treatment of 655 cases over a ten year period. The most important nonsurgical methods for the treatment of thyrotoxicosis at present are: (1) goitrogenic compounds (6-propyl-2-thiouracil) and (2) radioactive iodine. The former is far less effective than thyroidectomy in producing permanent remission. The latter has received too limited a trial to permit final conclusions regarding its efficacy and safety. Subtotal thyroidectomy, when performed under optimal conditions, remains the most effective form of therapy in thyrotoxicosis.

ABSTRACT OF DISCUSSION

DR. HAROLD L. FOSS, Danville, Pa.: This has been an able review of the physiology of the thyroid gland and of the accepted therapeutic procedures in the treatment of diseases peculiar to it. I agree with all that Dr. Ravdin and associates have presented in their excellent paper. One might emphasize the incalculable value of Astwood's clinical researches. Interest in the subject was reawakened six years ago by the work of the MacKenzies at Johns Hopkins Hospital on goitrogenic drugs and that of Richter and Clisby on goiter depressant substances—thiourea and related compounds. Search for a substance which would inhibit thyroid function but which did not possess the unpredictable potencies of thiouracil resulted in the preparation of some four hundred drugs. Those having the greatest effect were derivatives of thiourea, all having in common the thioureylene radical, NH-CS-NH. Continued investigation resulted in the synthesis of propylthiouracil. The biologic effects of irradiation by radioactive iodine is referred to by the authors. Hertz and Williams of Boston, Soley of the University of California, Haines and his associates of the Mayo Clinic and many others have reported encouragingly on results of this treatment of hyperthyroidism. In using these substances one must bear in mind the carcinogenic hazards. Time so far elapsed is too short for definite conclusions to be drawn. The same is true regarding the treatment of carcinoma of the thyroid with isotopes. Treatment, particularly of the papillary and allied forms by this therapy, has not been very promising. Methylthiouracil seems to offer some promise in hyperthyroidism, yet there is some question as to its value being any greater than propyl itself. It is appropriate to call attention to the large number of patients who suffer from hyperthyroidism and yet have no goiter; toxic diffuse goiter (Graves' disease), in its incipiency, unquestionably can be controlled, especially with propylthiouracil. One might sound a warning against too optimistic an approach to propylthiouracil therapy in all cases of toxic diffuse, or exophthalmic, goiter. At the same time one might caution against the indiscriminate thyroidectomizing of patients with goiters who are suspected of having hyperthyroidism, the diagnosis being made on spurious elevated rates. The high percentage of carcinomas which develop in fetal adenomas should always be borne in mind. The importance of the prophylactic removal of discrete nodules suspected of being true adenomas must never be lost sight of.

DR. WARREN H. COLE, Chicago: The philosophy suggested by Dr. Ravdin and his co-workers regarding the treatment of thyrotoxicosis is similar to that maintained by my colleagues and me. They use propylthiouracil in a manner similar to that which we have adopted. We likewise are not optimistic about the effects of irradiated iodine. They very correctly have advised a heavy dosage of vitamins. In general, we give propylthiouracil only to prepare patients for operation, but in some cases we give it with the assumption that we may obtain a permanent remission, for example, in patients with mild toxicity and small glands and those having recurrent hyperthyroidism. In a group of 14 patients with an average basal metabolic rate of only plus 28 per cent, we obtained permanent remission in 70 per cent. In a group of 20 patients with an average basal metabolic rate of about 52 per cent above normal, we had 50 per cent remissions lasting at least one year. However, these figures cannot be used as an index of incidence of permanent remissions following propylthiouracil therapy since these patients are in reality closely screened. In general they had small glands and had had symptoms only for a short time. If the patients have large glands we rarely try to obtain permanent remission, since we found out early in our experience that recurrence was almost universal when treatment with the drug was stopped, particularly when toxicity was severe. I agree with the authors that it is highly desirable to have the basal metabolic rate approach normal before thyroidectomy is performed. I am convinced that the operative mortality rate will be definitely lower if operation is postponed until the basal metabolic rate is reduced to a normal or near normal figure. We have had no deaths in about 100 patients having thyroidectomy following propylthiouracil therapy. When one summarizes the experience of many men reporting results of thyroidectomy following propylthiouracil one obtains information supporting the statement that the mortality rate is lowered by this therapy. I do not routinely isolate the recurrent laryngeal nerve, but I do insist on good exposure. Accordingly, I would not hesitate to cut the strap muscles or to move to the other side of the table to remove the second lobe if exposure is doubtful.

DR. I. S. RAVDIN: I wish to thank Dr. Foss and Dr. Cole for their discussions. I am in complete accord with what they have said. It was not possible in the presentation of this paper to give adequate historical credit, but this is given in the footnotes in the paper. It is in the type of patient with mild symptoms of hyperthyroidism and a slightly enlarged goiter that propylthiouracil frequently gives its best results. We have had a highly selected group of patients who have been treated in our Endocrine Clinic with propylthiouracil for a period of six to twenty-four months. Not more than 50 per cent of this very highly selected group of patients have maintained a permanent remission after stopping treatment with the drug. One therefore cannot look for a high incidence of cures from the use of propylthiouracil or any related compounds in an unselected group of patients wtih hyperthyroidism. It has seemed to all of us in our Endocrine Clinic—the internists, the radiologists and the surgeons—that at present a radical resection of the thyroid gland is the most adequate and favorable means of permanently controlling the thyrotoxic state.

DEVELOPMENT OF DOUBLE-LUMENED TUBE FOR INTESTINAL INTUBATION

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In 1934 the late William Osler Abbott and I [1] introduced small intestinal intubation as a practical clinical procedure. It was not the first time that the human small bowel had been intubated or that the significance of such a procedure had been appreciated. It was merely the first time that a technic had been described that permitted the ready accomplishment of the desired objectives. This was rendered possible by the development of a double-lumened rubber tube and the attachment at its distal end of a collapsible balloon.

PREVIOUS HISTORY

Although we were not familiar with his work until shortly before our original publication, Scheltema,[2] a Netherlands pediatrician, in 1908, twenty-six years earlier, had accomplished in children what he termed "permeation or automatic sounding of the alimentary tract." The idea that such intubation could be accomplished passively (without activity on the part of the operator) occurred to him as a result of his observations of a horse hair protruding from each end of the digestive tract of a chicken and of strings dangling from the anus of dogs and cats. Then he conducted experiments on various animals and secured the passage of mercury-filled tubes through the digestive tract of frogs. Being assured of the safety of the procedure he finally tried it out in a few children in the following manner. After cocainizing the nasal mucosa he introduced his tube through the nose, brought the distal end out through the mouth, inserted a bicycle bearing ball to act as a "pilot bob" and then reintroduced the expanded end through the mouth into the stomach. Thence it was propelled onward by peristaltic waves. He found that eighteen to sixty hours were required for its passage into the duodenum, but that the subsequent transit was rapid. His tubes varied from 12 to 24 mm. in circumference (12 to 24 F), and they had sufficiently thick walls to permit the aspiration of intestinal contents. He referred to the possible use of the technic in the physiologic and bacteriologic study of the small intestine, in the diagnosis of disease, including obstruction, and especially in the administration of fluids and the local application of medicaments to disease processes.

During the following year, in 1909, Einhorn [3] first demonstrated his "duodenal pump" at the German Hospital and Dispensary in New York, and ten years later, still without knowledge of Scheltema's accomplishments, he [4] introduced a 15 to 20 foot long (4.57 to 6.1 meters, 8 F) tube for the instillation of fluids into the intestine, the lumen of the tube being too small for the aspiration of contents. During the following year Buckstein [5] referred to the use of such a tube for the injection of a barium mixture and the radiologic study of small intestinal loops; he also suggested its use for the chemical and bacteriologic studies of the intestinal contents. McClendon,[6] in the same year, passed a tube 7 feet (213 cm.) beyond the mouth, using a 6 Gm. iron weight attached by means of surgical gut, thus allowing the weight to be released and passed after digestion of the surgical gut. His objective was the study of the reaction of the intestinal contents. This was followed by Einhorn's [7] development of an ingenious jointed intestinal tube, consisting of four or more separate meter length tubes, each one as it was swallowed having another segment attached by a small screw. Through that tube he claimed to have made collections from the upper levels of the intestine, but reported no studies. Four years later van der Reis and Schembra,[8] in Germany, published a report showing radiograms of small caliber, mercury-filled tubes passed throughout the entire length of the human bowel. They first called attention to the relatively short tube that was required to traverse the entire digestive tract. In 1931 Jones and Pierce,[9] for the study of pain reference, developed the method of attaching a collapsible balloon to the distal end of an intestinal tube. They apparently did not employ the balloon for the advancement of the tube, but inflated it from time to time to produce pain.

Meanwhile, about 1915, stimulated by Hertz's experiments and book, "Sensibility of the Alimentary Canal," by Carlson's then current work on the motor functions of the stomach and by Einhorn's studies of the duodenal contents, I decided to study the small intestinal secretions and attempted intestinal intubation. I was discouraged, however, by the time required to reach the lower bowel with the available small Einhorn tube and soon abandoned the attempt. Again, in 1921, when the jointed tube was described, I resumed the project and on a number of occasions succeeded in securing the entrance of the tube into the ileum, but again several days were required, the patients became exhausted and no satisfactory specimens could be obtained. The work again was abandoned.

DEVELOPMENT OF THE MILLER-ABBOTT TUBE

Then, in 1930, Abbott, previously trained in physiology and pharmacology, became a member of my staff. He wished to carry over to human beings certain experiments on the motor effects of various drugs on the duodenum and for that purpose was employing a balloon tied over the distal end of a duodenal tube. He was repeatedly frustrated in the midst of securing kymographic records by having the distended balloon slip beyond the duodenum. It then occurred to me that such spontaneous and rapid transit of a distended balloon might solve the problem of intestinal intubation, and the suggestion was made that he give more slack to the tube and follow its progress under the

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3. Einhorn, M.: The Duodenal Tube, Philadelphia, F. A. Davis Company, 1926, p. 24.

4. Einhorn, M.: An Intestinal Tube, New York M. J. **110**: 456, 1919.

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9. Jones, C. M., and Pierce, F. D.: The Mechanism and Reference of Pain from the Lower Intestinal Tract, Tr. A. Am. Physicians **46**: 311, 1931.

fluoroscope. To our surprise the tube passed rapidly and within a few hours was in the lower part of the ileum. It then remained only to repeat the experiment with a second tube attached to the first one just behind the balloon. In this way we at once had available an apparatus that readily could be introduced and an open tube through which injections could be made into the bowel and the intestinal contents aspirated. Further observations soon led to a realization that, instead of a 15 to 20 foot tube, such as Einhorn's, one of half that length was sufficient to reach the cecum. This is explained by the fact that during life the bowel is contracted lengthwise and also that the tube tends to hug the mesenteric border of the bowel or to follow the shortest course from one loop to another, at times bringing about some pleating of the intestinal wall.

The next step was to simplify the procedure by using a double-lumened tube, one lumen for the control of the balloon, inflating it when the duodenum was reached and deflating it when it was desired to stop the progress of the tube; the other, for the aspiration of contents or for the injection of fluids directly into specified segments. Also, the balloon manifestly supplied a means for recording pressure changes at various areas of the bowel.

We knew that double-lumened tubes had been manufactured for urologic work; also that Einhorn had secured them for esophageal and gastric work, but we did not appreciate at the time that such tubes had been made by hand, being rolled over a mandrel and wrapped with fabric to hold the rubber in place during the vulcanizing period, or that tubes of greater length had not been, and probably could not be, so made. Rubber manufacturers throughout this country, France and England were appealed to, but with one exception they declined to attempt its development. The United States Rubber Company alone agreed to make the effort, employing the extrusion process and admitting that the product could not be of high grade. That organization succeeded within a few months, and after a year's experimenting we [1] published our first paper on the subject.

TECHNIC AND USES

With such a tube, modified from time to time, we soon found it possible, without unduly disturbing the subject, to intubate the small bowel at will and often also the large intestine, to make pressure readings within the limits of the method, to secure satisfactory specimens for chemical and bacteriologic studies and to introduce barium and other mixtures for the study of anatomic defects along the course of the alimentary tract.

In our original paper [1] we suggested that the method might eventually aid in the diagnosis and treatment of intestinal lesions. Meantime our staff [10] undertook various studies on the secretory, motor and absorptive functions of the tract. Also, with the help of Rawson, Abbott [11] adapted the tube for the simultaneous aspiration of stomach contents and the instillation of fluids and nutriment into the small bowel after gastroenterostomy. A three lumen tube [12] was developed for the collection of uncontaminated small intestinal secretion and for the study of absorption from an isolated segment of the intestine, later modified by Nicholson and Chornock.[13] Other variations permitted a study of pure gastric and duodenal secretions and absorption [10]; also, a study of effects of drugs on the colon (Elsom and Drossner [14]) and continuous records of pressure changes as the balloon descended along the bowel (Ingelfinger and Abbott [15]). Additional modifications of the technic have been developed in other clinics.

It was not until 1938, however, that the technic for intubating the obstructed bowel was introduced.[16] That followed a suggestion by Charles G. Johnston, then on the surgical staff of our hospital, that gastroduodenal drainage, as introduced by Wangensteen and Paine,[17] might be even more effective if the intestine itself could be intubated. He requested that the new technic be tried out in such a case. He sought Abbott's help, and in their first patient, an elderly man with tremendous distention due to an ileocecal intussusception, the tube readily entered the intestine and, as the drainage was maintained, it rapidly passed along the bowel, soon bringing about complete deflation. In their first report they referred to 16 cases, in 13 of which there had been successful intubation. These included cases of both paralytic ileus and mechanical obstruction.

Subsequently the technic was adopted by various surgeons elsewhere, especially by members of the staff of Whipple [18] at the Presbyterian Hospital in New York, where it soon became a routine procedure and where by 1940 it was regarded as one of the three factors responsible over an eight year period for a reduction in the mortality rate of intestinal obstruction from 29.6 to 6.5 per cent. To Whipple is due much credit for its recognition as a helpful practical procedure.

RECRUITING SUBJECTS FOR EXPERIMENT

It is not my intention at this time, however, to refer to the value of the procedure, but rather to limit myself to points of historical interest. In this connection I wish finally to call attention to Abbott's [19] inimitable description of some of the difficulties attendant on his use of hired subjects for the earlier experiments. As typical of the humorous nature of his presentation before the Charaka Club, I shall paraphrase briefly one feature of it.

Having exhausted the hospital personnel, including patients and members of the staff, and having failed to secure recruits on a fee basis through various welfare agencies and churches, even beggars and the jobless of that day of depression, Harry, the Negro janitor, was

10. Miller, T. G.: Intubation Studies of the Human Small Intestine: A Review of a Ten Year Experience, Gastroenterology **3**: 141, 1944.
11. Abbott, W. O., and Rawson, A. J.: A Tube for Use in the Post-Operative Care of Gastroenterostomy Cases, J. A. M. A. **108**: 1873 (May 29) 1937; A Tube for Use in the Postoperative Care of Gastro-Enterostomy Cases—A Correction, ibid. **112**: 2414 (June 10) 1939.
12. Abbott, W. O., and Miller, T. G.: Intubation Studies of the Human Small Intestine: III .A Technic for the Collection of Pure Intestinal Secretion and for the Study of Intestinal Absorption, J. A. M. A. **106**: 16 (Jan. 4) 1936.
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14. Elsom, K. A., and Drossner, J. L.: Intubation Studies of the Human Small Intestine: The Effect of Atropine and Belladonna on the Motor Activity of the Small Intestine and Colon, Am. J. Digest. Dis. **9**: 589, 1939.
15. Ingelfinger, F. J., and Abbott, W. O.: Intubation Studies of the Human Small Intestine: XX. The Diagnostic Significance of Motor Disturbances, Am. J. Digest. Dis. **7**: 468, 1940.
16. Abbott, W. O., and Johnston, C. G.: Intubation Studies of the Human Small Intestine: X. A Non-Surgical Method of Treating, Localizing and Diagnosing the Nature of Obstructive Lesions, Surg., Gynec. & Obst. **66**: 691, 1938.
17. Wangensteen, O. H., and Paine, J. R.: Treatment of Acute Intestinal Obstruction by Suction with a Duodenal Tube, J. A. M. A. **101**: 1532 (Nov 11) 1933.
18. Whipple, A. O.: (*a*) The use of the Miller-Abbott Tube in the Surgery of The Large Bowel, Surgery **8**: 289 (Aug.) 1940; (*b*) Factors Responsible for Present Day Low Mortality in Acute Ileus, Northwest. Med. **40**: 112, 1941.
19. Abbott, W. O.: The Problem of the Professional Guinea Pig, Proc. Charaka Club **10**: 249, 1941.

called in and offered 50 cents for every able-bodied subject, sober and on hand at 8:30 a. m. The subject himself was to receive $2, the usual cost of a dog. The first comer was Flip Lavall, tall, broad shouldered, black as the ace of spades, a lightweight prize fighter; after him, Jim and Dan and Slim and others. One was an epileptic, who in a convulsion bit through his tube and then passed it per rectum. One had a 38 caliber revolver bullet in his erector spinae muscles, which was mistaken for the metal tip on the tube until it was found impossible to manipulate the object into the duodenum.

On the day preceding a scheduled exhibit at the 1935 American Medical Association meeting in Atlantic City, all of these professionals went on strike for double wages. The blackamoors were promptly fired, lock, stock and barrel. Incidentally an impassioned appeal to third year medical students in the midst of their final examination for the year saved the day. The volunteers stood up like veterans of the line and enabled the exhibit to receive a Special Certificate of Honor from the Association.

Finally it was revealed that for one and a half years Flip had had his crew so organized that each of them regularly made a financial cut to him; otherwise having the "daylight beat out of him." It was Flip who organized the strike to increase his wealth. Eventually all but two of the group landed in gaol, Flip for rape and the others for burglary.

COMMENT

This story of the development of the double-lumened tube for intubation cannot be told, however, without again giving maximal credit to Abbott for his energy, perseverance and ingenuity in perfecting the procedure on a practical basis. To Karr and to Glenn, both also now deceased, much credit is due; also to the other members of our staff during the 1930's: Elsom, Warren, Drossner, Boon, Ingelfinger, Zetzel, Machella, Nicholson and Moseley. I also wish to pay tribute to Sarah G. Miller, who, as a volunteer worker, patiently supervised all of the early subjects, both patients and hired tube swallowers, and who herself was wholly responsible for the accomplishment of many of the original intubations.

Q Fever in Los Angeles Raw Milk.—In California, where intensive studies of Q fever are being carried out by the California State Department of Public Health and the United States Public Health Service, the disease has been found in 16 counties in a period of less than one year. In Los Angeles County, where Q fever appears to be endemic, more than 300 cases and three deaths have been studied. Results of surveys including more than 3,000 persons indicated 1 per cent of the persons residing in the endemic area possess serum antibodies for Q fever. A recent report announced that C. burneti was present in the raw milk supply of four of five widely separated dairies in the Los Angeles area. An extension of these studies has indicated that the raw milk of more than 60 per cent of the 63 dairies tested in the area contain sufficient quantities of C. burneti to readily infect guinea pigs and that more than 10 per cent of approximately 4,000 cows are infected. Fortunately, commercial pasteurization methods in rigidly controlled field tests appeared to be nearly 100 per cent effective in eliminating the infection from milk.—Robert J. Huebner, William L. Jellison and M. Dorothy Beck, *Annals of Internal Medicine*, March 1949, page 495.

CONTINUOUS SUCTION DRAINAGE

A Historical Evaluation of Intestinal Obstruction

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In August 1931 Wangensteen first employed the principle of continuous suction transmitted through a duodenal tube as an effective means of treatment in certain cases of intestinal obstruction involving the small bowel. In a historical sense this procedure was the natural evolution of the use of duodenal tubes in the diagnosis and treatment of various diseases affecting the gastrointestinal tract. It should be remembered that the duodenal tube, in contrast to the stomach tube, was entirely an American development and was the direct result of the desire of clinicians to obtain samples of duodenal contents for diagnostic purposes.

In the wake of the work and experiments of such men as Turck,[1] Hemmeter [2] and Kuhn [3] during the last decade of the nineteenth century, Gross [4] and Einhorn [5] of New York, independently and almost simultaneously, presented to the medical profession simple practical duodenal tubes which could be passed consistently into the duodenum. Both of these tubes had perforated metal capsules attached to long rubber tubes with relatively small lumens. In a few hours, gastric peristalsis aided by gravity caused these tubes to pass from the stomach into the duodenum.

Internists were the first fully to grasp the significance of the opportunities afforded by this simple new instrument. Its use quickly spread to Europe, and literally dozens of men began to use it extensively. The literature on this subject after 1910 is voluminous, and suggested improvements were numerous. For the most part, however, the principle of a weighted tip and a narrow soft rubber tube of small diameter was retained until Levin of New Orleans in 1921 described his smooth catheter-tipped duodenal tube.[6] This tube had a great advantage over other duodenal tubes in that it could be passed directly through the nares and was better tolerated by the patient when kept in place for a relatively long time.

The examination, plus analysis, of samples of duodenal secretions was the prime purpose for which the duodenal tube was invented and continued to be its most important use up to about 1920. After that, however, the use of such tubes in the treatment of diseases became more prevalent, so that by 1931 the greater part of the publications concerning this instrument dealt with its use in the treatment of gastric and intestinal distention. Westermann,[7] as early as 1910, reported 15 patients with severe peritonitis with ileus

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Read in the Session on the History of Medicine of the Section on Miscellaneous Topics at the Ninety-Seventh Annual Session of the American Medical Association, Chicago, June 25, 1948.

1. Turck, F. B.: The Improved Gyromele, New York M. J. **63**: 191, 1896.
2. Hemmeter, J. C.: Intubation of the Duodenum, Bull. Johns Hopkins Hosp. **7**: 79, 1896.
3. Kuhn, F.: Sondierungen am Magen, Pylorus und Dunndarm des Menschen, Arch. f. Verdauungskr. **3**: 19, 1896.
4. Gross, M.: A Duodenal Tube: Preliminary Communication, New York M. J. **91**: 77, 1910.
5. Einhorn, M.: A Practical Method of Obtaining the Duodenal Contents in Man, M. Rec. **77**: 98, 1910.
6. Levin, A. L.: New Gastroduodenal Catheter, J. A. M. A. **76**: 1007 (April 9) 1921.
7. Westermann, C. W. J.: Ueber die Anwendung des Dauermagenhebers bei der Nachbehandlung schwerer Peritonitisfalle, Zentralbl. f. Chir. **37**: 356, 1910.

treated by continuous siphonage of the stomach by means of a small tube passed through the nose. This surgeon remarked that the efficiency of this method of treatment was not all that might be desired, because of periodic interruption of the siphonage action by gas which entered the tube. A year later Kappis [8] reported 10 similar patients treated in the same way and warmly recommended the procedure. Further endorsement was forthcoming from Kanavel [9] in 1916. Following the advocacy of this method of treatment by Matas [10] in 1924, practically every treatise written on postoperative treatment included the use of the duodenal tube for siphon drainage postoperatively in cases of persistent vomiting or distention.

WANGENSTEEN'S CONTRIBUTION

The aforementioned facts were known in a general way to Wangensteen in 1931. He did not know, however, that Ward of San Francisco had described an apparatus for continuous gastric or duodenal lavage through a Jutte tube and recommended its use in the treatment of general peritonitis, postoperative ileus, intestinal obstruction and acute gastric dilatation. This apparatus exerted a constant mild suction on the indwelling tube.[11]

On a hot day early in August of 1931 a somewhat corpulent man in the middle sixties with decided abdominal distention was admitted to the University of Minnesota Hospitals. His chief complaint was severe prostrating pain in the upper part of the abdomen which had appeared suddenly forty-two hours previously, while he was changing a tire on his automobile. At operation he was found to have a peptic ulcer which had perforated the anterior wall of his stomach and produced generalized peritonitis. After closure of the perforation, Wangensteen inserted a catheter through the wall of the stomach and brought it out through the abdominal incision as a gastrostomy. Recalling the reports of Westermann [7] and Kappis [8] and knowing also that McIver [12] in 1926 had shown that the major component of intestinal gas came from swallowed air, Wangensteen assigned to the resident and intern on the service the duty of keeping the stomach empty and suggested that, if possible, some means be found of maintaining constant suction on the gastrostomy catheter.

After an evening and a night of improvization and trials with such utensils as enema cans, bottles and five gallon buckets, the following morning saw the simple but extremely effective apparatus made of two large bottles together with odd pieces of glass and rubber tubing now widely used and known as "a suction set." This first patient survived forty-two days after operation and then died of his peritonitis. During this six week period, suction was maintained on the catheter most of the time and the distention of the abdomen was well controlled.

Encouraged by the result obtained in this patient as far as control of the distention was concerned, Wangensteen speculated as to whether or not this method might not have some virtue in the treatment of mechanical obstruction of the small intestine due to adhesions. He had observed in such cases that after enterostomy, without any direct surgical attack on the adhesions, drainage of fluid through the enterostomy catheter was often minimal after the initial decompression had been effected and that frequently the obstruction was relieved without further operative intervention. This logically suggested the possibility that if the distended proximal gut of a patient with mechanical obstruction of the small bowel could be effectively drained by means of a duodenal tube connected to a source of constant suction, operation might be avoided.

During the early evening of a day in the latter part of August 1931 there was admitted to the University of Minnesota Hospitals a poorly nourished woman of 72 in a state of hypochloremia with pronounced distention of the abdomen due to a mechanical obstruction. The cause of the obstruction was thought to be a carcinoma of the cecum. Vomiting had been profuse for several days. This patient was in an extremely poor general condition—such a poor condition, in fact, that an immediate operation seemed out of the question. After a careful appraisal of the situation and the risks involved, Wangensteen decided to apply constant suction to an indwelling Levin type duodenal tube while adequate quantities of isotonic sodium chloride solution and dextrose were given by vein. Decision as to when the patient would be operated on was postponed until the following morning. By good fortune the duodenal tube soon passed through the pylorus, and by the following morning the patient was much improved. Roentgen examination of the abdomen confirmed the clinical impression that the intestinal distention had decreased a great deal. Suction was continued for the next thirty-six hours. During this period the degree of abdominal distention continued to decrease until decompression was complete. At this point the patient was operated on, since the obstruction was thought to be of a persistent nature. A stricture of the terminal portion of the ileum was found, and the patient made an uneventful recovery.

The results in this case made a profound impression on every one concerned. Successful decompression had been achieved in a practically moribund patient by the use of a duodenal tube, and her general condition sufficiently improved by the intravenous injection of isotonic sodium chloride solution and dextrose, so that definitive operation could be performed with a great deal less risk than in the average patient with intestinal obstruction. During the succeeding weeks, 2 patients with obstruction of the small bowel due to adhesions were treated by continuous suction drainage alone. Decompression required about two days, and the obstruction was spontaneously relieved. In a fourth case of adhesive obstruction, the method failed. In this case recovery followed the making of an enterostomy.

On the basis of his experience in these first 4 cases, Wangensteen, firmly convinced of the value of this new method, described and recommended it to the profession in December 1931 at the meeting of the Western Surgical Association in Denver.[13]

8. Kappis, M.: Einige parktische Winke zur Behandlung des peritonitischen Ileus, München. med. Wchnschr. **58**: 15, 1911.
9. Kanavel, A. B.: Continual Stomach Lavage and Continuous Hypodermoclysis in Peritonitis, Persistent Vomiting with Dehydration, and Dilated Stomach, with a Description of a Modified Stomach Tube, Surg., Gynec. & Obst. **33**: 483, 1916.
10. Matas, R.: The Continued Intravenous "Drip," Ann. Surg. **79**: 643, 1924.
11. Ward, R.: Apparatus for Continuous Gastric or Duodenal Lavage, J. A. M. A. **84**: 1114 (April 11) 1925.
12. McIver, M. A.; Benedict, E. B., and Cline, J. W.: Postoperative Gaseous Distention of the Intestine, Arch. Surg. **13**: 588 (Oct.) 1026.
13. Wangensteen, O. H.: Early Diagnosis of Acute Intestinal Obstruction with Comments on Pathology and Treatment, with Report of Successful Decompression of Three Cases of Mechanical Bowel Obstruction by Nasal Catheter Suction Siphonage, West. J. Surg. **40**: 1, 1932.

During the following winter and spring, Wangensteen and his colleagues studied this new procedure critically and extensively. Certain of its limitations were seen immediately. In his first article on the subject Wangensteen said, "In adhesive types of obstruction in which the cause often ceases to operate following decompression of the bowel, the method should have its greatest field of usefulness, and in postoperative obstructions particularly, the method should prove to be an agent of therapeutic value."[13] Experience has well borne out these claims. It was realized that only harm could come from treating strangulation obstructions definitively by this method. Experience soon showed that, in the presence of an acute obstruction of the large bowel, suction usually prevented the distention of the colon from increasing but could not be expected to decrease it because of the ileocecal valve.

Other phases of the method were studied also. Since successful decompression was found often to rest with the ability of the clinician to cause the tip of the duodenal tube to pass beyond the pyloric sphincter, considerable effort was made to improve the passage of such tubes. No easy method was found. Meticulous attention to detail and careful frequent clinical and roentgen examination of the patient was essential. Two changes were made in the Levin type duodenal tube. One was the construction of the distal tip of the tube with special rubber of high specific gravity. The other was the extension of the perforations of the tube proximally over 9 inches (23 cm.), so that suction might be simultaneously carried out in both the stomach and duodenum. The possibiilty of utilization of a long tube with a double lumen was discussed on one occasion, but no actual efforts along this line were made until after the development of the Miller-Abbott tube.

No essential improvement was made on the simple suction apparatus improvised for the first patient at an estimated cost of about 50 cents. The addition of a third bottle allowed for the collection of the aspirated fluid, but both the two and the three bottle system permit the accurate measurement of both the fluid and gas return by the suction tube. This apparatus provides an average negative pressure of about 90 cm. of water, a pressure which laboratory studies have shown to be in the optimal range. The relative superiority of constant suction over siphonage through a duodenal tube was tested in patients postoperatively by means of a Mariotte bottle.[14] The results of this study were so definite that it was immediately realized that the continuous suction method was by far the best means yet devised of treating paralytic ileus. As a result the suction principle has seen its widest use not in the treatment of mechanical obstruction but in the care of patients after major abdominal operations.

By the summer of 1932 Wangensteen and Paine[15] had treated 32 patients with acute mechanical obstruction of the small bowel in which suction applied to an indwelling duodenal tube was employed. The mortality rate in this group of patients was 22 per cent. Twenty of these patients were treated by suction alone with spontaneous release of the obstructing mechanism after decompression had been achieved. Only 3 of this group died, a mortality rate of 15 per cent.

COMMENT

The chief historical significance of Wangensteen's contribution lies in the fact that it marks the beginning of a downward trend in the mortality rate of patients with intestinal obstruction—the first such trend since the advent of abdominal surgery. Prior to 1931 the reported mortality rate of patients with intestinal obstruction varied, with only rare exceptions, between 30 per cent and 50 per cent. Recently reported series of cases show mortality rates of about 15 per cent. At Wangensteen's own clinic, where an intense interest in the whole problem of obstruction has existed for many years, Dennis and Brown[16] in 1942 reported a mortality rate of 13 per cent. It cannot be claimed that the suction treatment alone is responsible for this decline. Factors such as a better understanding of the fluid and electrolyte requirements of the obstructed patient, better anesthesia, blood transfusions and better trained surgeons have all played a part. Suction applied to an indwelling duodenal tube has not replaced operation in the treatment of intestinal obstruction and never will. It has made surgical treatment safer, however, and has become an essential part in the treatment of all such patients. It has changed our thinking in regard to the urgency of operation in all patients with nonstrangulating types of obstruction of the small bowel. These patients, by the use of suction, can now be properly prepared for operation by the adequate administration of fluid and electrolytes and treated as patients for elective surgical treatment with much greater convenience to the surgeon and hospital staff. The fact that certain patients with obstruction, when treated by suction, do not require operation can gratefully be accepted as an additional boon.

Of major importance also is the effect of the application of the suction principle to the management of patients with paralytic ileus. Doctors who remember the days of protracted postoperative vomiting and the necessity of repeated gastric lavage by means of the large stomach tube will always be grateful for the suction principle. A surgeon in a small midwestern city once, with considerable truth, remarked that the "suction tube" had made a civilized business out of abdominal surgery.

Wangensteen was not the first to use suction, but he developed it independently, saw its value and popularized it. His contribution in 1931 marked the beginning of a new chapter in the understanding of the pathologic physiology of intestinal obstruction and in the treatment of patients with all varieties of this condition. As a result of his work, distention of the bowel and its secondary effects rather than some hypothetic toxin has come to be recognized as the most important factor in the pathologic changes of intestinal obstruction. As has been repeatedly shown in the history of medicine, a new concept has had a much greater influence than its discoverer anticipated.

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STUDY OF HOME CARE IN A MUNICIPAL HOSPITAL

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Home care represents an extension of medical and nursing service from the hospital to the home. It is one approach to the complex problem of providing continuous medical care to those segments of the population which do not enjoy this advantage at the present time. Home care is also an approach to the problem of hospital beds since it permits earlier discharge of the patient from the hospital and minimizes unnecessary readmissions through continuous medical follow-up. Experience has shown that it costs less to treat a patient at home than in the hospital, and, although such economy is by no means the prime objective of this program, it is nevertheless an important consideration in hospital administration.

TABLE 1.—*Diagnostic Classification of Patients Accepted to Home Care*

Primary Diagnosis		Number of Patients
Cardiac diseases		28
Arteriosclerotic	6	
Arteriosclerotic and hypertensive	14	
Rheumatic	7	
Syphilitic	1	
Cerebral thrombosis		1
Pernicious anemia and rheumatoid arthritis		1
Hypertrophic osteoarthritis		1
Duodenal ulcer		1
Bronchogenic carcinoma		1
Multiple myeloma		1
Paraplegia secondary to extramedullary neoplasm		1
Chronic thrombophlebitis		1
Chronic glomerulonephritis		1
Cirrhosis of liver		1
Acute infectious hepatitis		2
Homologous serum hepatitis		1
Pneumonia		1
Total		42

A pilot study of home care was conducted on the Third and Fourth (New York University) Medical Divisions of Bellevue Hospital during the year beginning Jan. 1, 1948. This program was suggested by the study conducted at Syracuse University by Jensen, Weiskotten and Thomas,[1] who reported home care to be a highly successful method of extending continuous medical service to the discharged hospital patient. The present study was given further impetus by the encouraging reports of Bluestone [2] and Cherkasky [3] of Montefiore Hospital in New York, where a home care program has been in progress since January 1947. The pilot study conducted at Bellevue Hospital represents the first application of the principles of home care to a large municipal institution. Certain conclusions of general interest may be drawn, and these provide the basis for the present report.

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Dr. William S. Tillett and Dr. Charles H. Nammack, Directors of the Third and Fourth Medical Divisions, respectively, of Bellevue Hospital, cooperated in this study. Dr. Henrik M. C. Luykx, Associate Professor of Preventive Medicine, contributed helpful suggestions and analysis of data.

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3. Cherkasky, M.: Hospital Service Goes Home, Mod. Hosp. **68**: 47 (May) 1947.

SELECTION OF PATIENTS

The extension of medical care to the home requires close coordination of the activities of physician, social worker and nurse. Since the present program was organized on a small scale, the staff consisted of one physician, one social worker and one secretary. Nursing care was provided through a contract arrangement with the Visiting Nurse Service of New York.

Patients were selected from the hospital wards on the basis of their medical condition and adequacy of home environment. Each patient's condition was such that the specialized facilities of the hospital were no longer essential, although further medical care was still definitely needed. Home care was not extended to patients capable of attending the outpatient department, since the service was designed to bridge the gap which exists between hospital and clinic. Although a few of our patients were convalescing from acute illness, most of them were afflicted with chronic diseases and represented long term problems in medical care. The mean age was 57.7, with a range of 14 to 84 years. A diagnostic classification of patients selected for home care appears in table 1. It is noted that the largest single group is represented by the degenerative forms of cardiovascular disease.

A careful evaluation of the patient's home situation by the social worker was of major importance in determining eligibility for home care. This included not only a survey of the physical characteristics of the home but, equally or more important, the response of the family to the patient's illness. Both patient and family frequently required assistance in making certain adjustments occasioned by the advent of prolonged illness. Careful evaluation often necessitated a visit to the home before the patient was discharged from the hospital. Economic factors presented serious difficulties in some cases, inasmuch as many of our patients and their families existed on marginal incomes. In some instances, the return of the patient to the home represented an added burden which could not be borne without some assistance from the Department of Welfare. Such assistance made home care possible in several instances in which it otherwise could not have been instituted. The cooperation of other community agencies in planning for the care of the patient was also enlisted when necessary.

The decision to accept a patient to home care was made jointly by the physician and the medical social worker. The resident and visiting staffs were encouraged to make referrals on all patients presenting possibilities for home care. As the objectives of the program became more generally known, there was a gradual increase in the number of such referrals. There were frequent discussions with the hospital staff both before and after acceptance of patients to home care. Periodic reports were given on all patients followed at home for any appreciable length of time. These reports were of particular interest to the hospital staff in cases presenting diagnostic or therapeutic problems.

DESCRIPTION OF PROGRAM

Since continuity of medical care was stressed, the patient was interviewed and examined by the home care physician prior to discharge from the hospital. A personal physician-patient relationship, which was

later perpetuated in the home, was thus established. Moreover, an opportunity was afforded the physician to become thoroughly familiar with the patient's clinical course and observations. Patients were usually sent home by ambulance, although transportation by taxi was equally satisfactory when patients could walk with

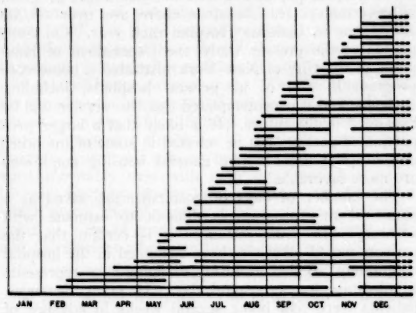


Fig. 1.—The duration of home care of 42 patients is indicated by the solid lines. Gaps in these lines represent periods of rehospitalization with subsequent return to home care. Dotted lines indicate patients transferred to the Department of Hospitals on completion of study.

assistance. After transfer to the home, the physician visited the patient regularly, usually once or twice weekly or more often, depending on the indications. He was also available at all times for any emergencies which arose. Although some patients manifested anxiety on their return to the home, this was usually dissipated with the realization that continuous medical care was still available.

The social worker also maintained frequent contact with the patient and family throughout the period of home care. The continued interest of the worker in the case and the close attention given to problems which frequently arose played a most important role in the satisfactory management of patients at home.

Nursing care was provided by the Visiting Nurse Service of New York on a fee for service basis, at the request of the home care physician. The visiting nurse carried out routine nursing care and also assisted the physician in such procedures as the parenteral administration of medication, performance of paracenteses and other therapeutic measures. Another important function of the nurse was the instruction of the family in simple nursing procedures, thereby enlisting additional aid which otherwise would have been lacking. Patients were provided with any hospital equipment required for their adequate care at home. Included were such items as hospital beds, scales, syringes, needles and catheters.

Since the additional burden of illness in a family sometimes necessitated housekeeping assistance, this was also provided in selected cases up to eight or ten hours a week. Laboratory procedures, such as blood cell counts, urinalyses and examinations of the chemical content of the blood, were performed in the laboratory of the New York University College of Medicine clinic, specimens being delivered there from the home. Medication was provided by arrangement with the clinic pharmacy. The services of consultants in the various medical and surgical specialties were available. Three patients required the services of a urologist, a dermatologist and a general surgeon, respectively. Home care records were maintained in the same fashion as hospital charts. In addition to a complete summary of the patient's course in the hospital, they contained progress records by the physician, social worker and visiting nurse, as well as laboratory and all other data pertinent to the case.

RESULTS

During the twelve month period beginning Jan. 1, 1948, there were 53 admissions to home care. Eleven of these represent readmissions as a result of rehospitalization with subsequent return to the home. After an initial period of organization, the patient load was gradually increased to a maximum of 25. During the latter half of this study the average daily census rose from 13.9 to 23.9. There was a total of 3,960 patient days during the period of study. The duration of home care in each case is shown in figure 1. A total of 701 home visits was made by the home care physician. In addition to the regularly scheduled visits, there were 34 emergency calls. These additional calls were considered warranted in most instances, and several were occasioned by episodes leading to readmission of the patient to the hospital. The social worker made 262 visits and held 115 interviews with relatives of the patients. Nursing care was provided in 11 cases, representing a total of 145 visits by the visiting nurses. Housekeeping assistance was considered necessary in 7 instances. It was furnished by the program in 3 cases and voluntarily offered by friends and relatives in 2 others. In the remaining 2 instances, recommendations for housekeeping assistance were made to the Department of Welfare.

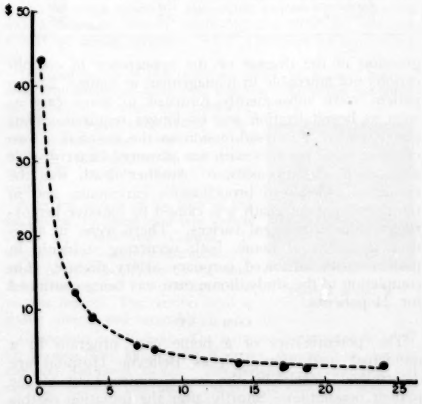


Fig. 2.—Relationship between patient load and cost per patient day. The minimum cost was reached with an average daily census of 17 to 23.9. The vertical column of figures at the left shows the average cost per patient day (for the month), and the horizontal row of figures at the bottom shows the average daily census (for the month).

The cost of treating patients at home was calculated on the basis of total expenditure and included the following items: medical and nursing care, social service, secretarial assistance, housekeeping, transportation of patients and staff, medication, hospital equipment and laboratory work. Figure 2 shows the

decrease in average cost per patient day as the census was gradually increased toward a maximum level. During the last five months of the study, when an optimum patient load was reached, the average cost per patient day was $2.38. This is approximately one fourth the cost of maintaining a patient in a municipal hospital, which is currently estimated in New York at $9 per day. The cost figures cited for home care include the contribution by the Department of Welfare toward medical and nursing costs in 14 of the cases.

The response of the patients and their families to home care was favorable with few exceptions. Most patients preferred the privacy of their homes and the proximity of their families to the hospital wards. They were particularly appreciative of the individual attention received while at home and cooperated fully with the home care staff during the program.

During the period of study, only 10 patients could be discharged from home care to the outpatient department. This is not unexpected, since most of the patients were initially selected on the basis of chronic illness and decided disability. Seventeen patients required readmission to the hospital following variable periods at home. This was usually the result of progression of the disease or the appearance of complications not amenable to management at home. Eleven patient were subsequently returned to home care as soon as hospitalization was no longer required. Four patients died after readmission to the hospital. Two of these were patients with far advanced heart disease and severe decompensation. Another death was the result of widespread bronchogenic carcinoma, and in the fourth patient death was caused by massive hemorrhage from esophageal varices. There were, in addition, 2 deaths at home, both occurring suddenly in patients with advanced coronary artery disease. On completion of the study, home care was being continued for 24 patients.[4]

TABLE 2.—*Total Cost of Home Care Program in Relation to Patient Load (Fig. 2)*

	Average Daily Census (for the Month)	Cost per Patient Day
January	0	.....
February	0.8	$43.48
March	2.9	12.08
April	3.9	9.26
May	6.8	5.39
June	8.2	4.58
July	13.9	2.67
August	17.2	2.41
September	18.7	2.07
October	17.0	2.11
November	17.0	2.25
December	23.9	2.41

COMMENT

The potentialities of a home care program in a municipal institution such as Bellevue Hospital are determined largely by the home environment of the patient population. Shortly after the initiation of this study it became apparent that, although suitable clinical material was abundant, the selection of patients was greatly limited by poor home conditions. During a three month period, most of the patients admitted to the Third Medical Division were carefully interviewed with respect to their home environment. Of 577 patients interviewed, only 92, or 16 per cent, were judged to have suitable homes. In 53, or 9 per cent, there was considerable question as to suitability, and in 354, or 61 per cent, the home situation was so poor as to preclude any possibility of home care. The remaining patients (14 per cent) were considered unsuitable because of the distant location of their homes. Assuming that this sample holds true for the entire hospital population, a sizable home care program is nevertheless feasible since there are over 60,000 admissions to Bellevue Hospital each year. On completion of the present study, the Department of Hospitals of the City of New York instituted a home care program in five of its general hospitals, including Bellevue, and it is contemplated that this service will be expanded in the future. It is likely that a larger proportion of patients can be selected in some of the other city hospital areas where general housing conditions are more favorable.

The number of days of hospitalization saved as a result of this program is difficult to estimate with accuracy. In some instances it is certain that the patients would otherwise have remained in the hospital indefinitely, so that each day of home care represents a substitute for a hospital day. In other instances, patients were sent home several weeks in advance of the expected date of discharge. Many of these required care at home for much longer periods than the probable remainder of their hospital stay, since they were unable to attend the outpatient department. In such cases, only the initial period of home care may be considered to have served as a substitute for hospitalization. However, the saving in hospital days is undoubtedly much greater, since readmissions to the hospital were reduced in number through continuous medical care. The same holds true for a number of patients who were selected for home care at the time of their actual discharge from the hospital. In the latter group, there was no immediate saving of hospital days, although it is certain that subsequent readmissions were held to a minimum.

The most gratifying aspect of this study has been the continuity of medical care which it has made available to patients for whom no such provision otherwise exists. Through proper selection, home care is applicable not only to patients who would ordinarily remain in the hospital for additional periods but to certain others at the time of actual discharge. On an active ward service, it is inevitable that a certain proportion of patients who require further medical care following discharge from the hospital will fail to receive it. The overcrowding of wards and the continuous need for keeping beds available for the more acutely ill often lead to the discharge of patients who are not capable of attending the outpatient department. The cardiac patient with decidedly diminished reserve who lives in a fourth floor walk-up apartment is but one example. This study has demonstrated that home care fills an important gap by extending medical care to indigent patients who no longer require the specialized facilities of the hospital but who are as yet unable to attend the clinic. Close integration of the services of the home care and outpatient departments is definitely indicated and should prove advantageous to both patient and hospital. In several instances, referrals were received from the cardiac clinic on patients who had lapsed in their attendance because of progressive diminution of cardiac reserve. These patients were satisfactorily managed at home, thereby averting an interruption of medical care and minimizing subsequent readmissions to the hospital.

4. These patients were transferred to the home care program now being conducted by the Department of Hospitals of the City of New York.

The selection of patients was limited almost exclusively to the chronically ill, since these were considered most adaptable to the purposes of a pilot study. Home care is equally applicable to the convalescent phases of acute illness, and a few such cases were included in the present program. With such patients the average duration of home care is, of course, somewhat shorter and the turnover of patients should be correspondingly more rapid. A large service carrying many patients with short term illness should demonstrate a more immediate and tangible sparing of hospital beds than was evident in the present study. On the other hand, the problem of continuity of medical care over long periods of time, which figured so prominently in the present program, would be a relatively minor one. Actually, any home care program in a general hospital must inevitably deal with both short and long term illness. Further studies are indicated to determine which group should receive greater emphasis from the point of view of maximum economy of hospital beds and the efficient administration of home care.

SUMMARY AND CONCLUSIONS

A pilot study of home care as applied to a large municipal hospital is described. It has been demonstrated that home care is a practical means of extending continuous medical service to certain indigent patients for whom no such provision otherwise exists. The cost of maintaining a patient at home is approximately one fourth the cost of hospital care.

An economy of hospital beds is effected since certain patients may be discharged at an earlier date and unnecessary readmissions are avoided through continuous medical follow-up. Further studies on a larger scale and over a longer period of time are indicated to determine more accurately the number of hospital beds thereby released.

Clinical Notes, Suggestions and New Instruments

LIPOMA OF THE TONGUE

Report of a Case

LEO E. BRAUNSTEIN, M.D.
Chicago

This case is reported because of the unusual occurrence of a simple lipoma of the tongue. A survey of the modern textbooks of oncology and pathology fails to reveal any allusion to this condition, though the presence of lipoma in many other tissues and organs is well known.

The patient, M. C., a white woman aged 58, was admitted to the Illinois Masonic Hospital in March 1948 for treatment of a comminuted fracture of the patella. This was accomplished by open reduction, with a good result. Her peculiar speech drew my attention to a rounded mass bobbling around in her mouth. As she spoke she seemed to try to keep the mass from slipping out of her mouth.

This mass was about 2 cm. in diameter and attached by an elongated sessile base to the right anterolateral free border of the tongue, near the tip. It was of a soft rubbery consistence, on a soft base of apparently normal lingual tissue, covered by a layer of thinned mucosal epithelium, through which the tumor appeared pinkish gray. Its contour was smooth and lobate, and it could easily be delineated by palpation as it was very superficial. Grossly, it seemed to be innocuous. There was no tenderness locally or discomfort in swallowing. The patient stated that it had been present for years, but, being symptomless, it had never concerned her. It was not until several months after the operation on the knee, when she was seeking employment, that she noted that her speech impediment was a handicap in securing a job; hence she had returned to have it removed.

The operative procedure was performed with local infiltration with 1 per cent procaine hydrochloride solution. The tongue was maintained in traction with a suture through its tip. Four mattress sutures through the full thickness of the tongue were placed for hemostasis along the projected line of incision, with plain surgical gut 00. The tumor was then excised, including a 5 mm. edge of normal lingual tissue. The upper and lower borders of the tongue were approximated with interrupted sutures of plain surgical gut 00. Recovery was uneventful. Dr. Lester King, of the Department of Pathology, examined the specimen grossly and microscopically and reported it to be a simple lipoma, with no unusual features.

SUMMARY

A case of lipoma of the tongue is reported. Although the lesion is exceedingly common, its location on the tongue seems to be rare.

Council on Physical Medicine and Rehabilitation

REPORTS OF THE COUNCIL

The Council on Physical Medicine and Rehabilitation has authorized publication of the following reports.

HOWARD A. CARTER, *Secretary.*

PARAVOX HEARING AID MODEL Y (YM, YC AND YC-7) ACCEPTABLE

Manufacturer: Paravox, Inc., 2056 East 4th Street, Cleveland 15.

The three new Paravox instruments, Models YM, YC and YC-7, are nearly identical in size, weight and appearance, and can be described together. They differ in that YM is provided with a magnetic receiver, while YC and YC-7 are provided with Brush crystal receivers. YC-7 is designed for low battery drain.

The instruments of this series are small "all in one" hearing aids. An aluminum alloy case contains microphone, amplifier and batteries. A wheel type combined on-off switch and gain control is located at right upper corner front. A white dot and a retaining snap make the "off" position distinctive and secure.

Paravox Model Y, Hearing Aid

Near the middle of the back of the instrument is a metal lever-type switch called the "Duo-Range Control." It introduces or removes attenuation of about 12 decibels, apparently the same at all frequencies. The instrument has no tone control. The receiver cord is plastic covered and reversible.

Dimensions and Weight.—The instruments measured 60 by 87 by 19 mm. (2⅜ by 3⁷⁄₁₆ by ¾ inch), disregarding clothing clip and duo-range switch. The weight, with batteries and receiver M, was just under 140 Gm. (5 ounces). With the crystal receiver, the weight was about 105 Gm. (4¾ ounces). The instruments require a 1.5 volt A-battery and 22.5 volt B-battery, both of the zinc-carbon type. The accompanying table summarizes the manufacturer's claims for battery-drain:

Model	Battery	Drain (Milliamperes)
YM	A	42
	B	0.42
YC	A	42
	B	0.44
YC-7	A	37
	B	0.18

The manufacturer submitted curves showing the frequency characteristics of each instrument. The acoustical responses of

the instruments met the requirements of the Council. The instruments were tried out in practice under the direction of a qualified investigator. They were reported satisfactory.

The Council on Physical Medicine and Rehabilitation voted to include the Paravox Hearing Aid, Model Y (YM, YC and YC-7) in its list of accepted devices.

BECK-LEE MODEL E ELECTROCARDIOGRAPH ACCEPTABLE

Manufacturer: Beck-Lee Corporation, 630 West Jackson Blvd., Chicago 6.

The Beck-Lee Model E Electrocardiograph is a portable string galvanometer. In the recording mechanism, a beam of light is cast onto a strip of sensitized paper 5.75 cm. (2¼ inches) wide. The sensitized paper is later developed in a dark room.

It weighs 14.5 Kg. (32 pounds) and measures 23 by 22 by 36 cm. (9 by 8½ by 14¼ inches). The domestic shipping weight is 19.5 Kg. (43 pounds) and the foreign, 32.5 Kg. (74 pounds). This latter weight includes waterproof wrapping and sealing and wooden shipping case.

Beck-Lee Electrocardiograph, Model E

Accessories include one set of patient electrodes, one set of electrode straps (rubber), one tube of electrode jelly, one ground wire with ground wire clamp, one film mounting folder, an instruction book and a guarantee card. The set of patient electrodes consists of one round, flat electrode for use on the chest and three square electrodes with curved surfaces for use on the arms and left leg; these electrodes are made of nickel silver.

The instrument is built for operation on alternating current at 110 to 120 volts and draws 70 watts. Converters are available to permit operation on direct current.

Specimens of the Beck-Lee Model E Electrocardiograph submitted to the Council were subjected to tests. The instrument meets the "Minimum Requirements for Acceptable Electrocardiographs" published in THE JOURNAL, May 31, 1947, page 455.

The automatic developing camera which is being advertised at the present time as an accessory was not investigated.

The Council on Physical Medicine and Rehabilitation voted to include the Beck-Lee Model E Electrocardiograph in its list of accepted devices.

EDIN INK-WRITING ELECTRONIC CARDIOGRAPH MODEL 210 T, ACCEPTABLE

Manufacturer: Edin Electronics Company, 207 Main Street, Worcester 8, Mass.

The Edin Ink-Writing Electronic Cardiograph, Model 210 T, is a portable electrocardiograph, housed in a carrying case. Models are manufactured for operation on 110 or 220 volt circuits, direct current or alternating current at 60, 50, 40 or 25 cycles. When operating on 115 volts of 60 cycle alternating current, it draws 86 watts (0.75 ampere). The instrument comes equipped with an individual timing check device operated by a synchronous motor.

The equipment includes 4 limb electrodes, 1 chest electrode and handle, 4 limb straps, 4 electrode leads, 1 jar of electrode jelly, 1 roll (9,440 cm. or 3,600 inches) of chart paper, 1 bottle of ink and 1 double ground lead. The whole measures 25 by 21 by 43 cm. (9¼ by 5¼ by 17 inches) and weighs 13 Kg. (29¾ pounds). The shipping weight is 16 Kg. (35 pounds). According to the firm, the electrocardiograph is distributed and serviced by selected supply houses on a franchise basis.

The Council secured convincing evidence that this instrument met its published requirements for acceptability of electrocardiographs. The Council on Physical Medicine and Rehabilitation voted to include the Edin Ink-Writing Electronic Cardiograph, Model 210 T, in its list of accepted devices.

OTARION HEARING AID MODEL E-4 ACCEPTABLE

Manufacturer: Otarion Hearing Aids, 159 North Dearborn Street, Chicago 1.

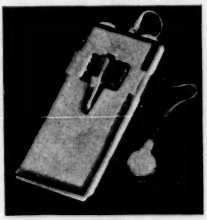
The Otarion Model E-4 Hearing Aid contains microphone, amplifier and batteries in a single sturdy, metal case. The case measures 114 by 61 by 20 mm. (4½ by 2⅜ by ¾ inch). Including batteries and receiver, it weighs 214 Gm. (7½ ounces).

One control combines "on-off" and tone control. The three positions of the latter are identified by 1, 2 and 3 dots. The various positions are adequately maintained by an appropriate snap action. Model E-4D has a built-in battery meter; otherwise it is identical with E-4.

The battery drain is stated to be 45 milliamperes for the "A" battery at 1.25 volts and 0.65 milliampere at 22.5 volts for the "B" battery.

The tone control gives choice of slight, moderate or considerable low tone suppression. For an input of 60 decibels with volume controls set at ⅓, the manufacturer shows a response curve that is flat plus or minus about 3 decibels from 1,300 to 3,600 cycles per second. With the 2 dot tone control, the characteristic rises from 200 to 1,200 cycles per second almost linearly with a slope of about 6 decibels per octave.

The maximum acoustic output with high setting of the output control is 128 decibels at 1,500 cycles per second. The peak at 1,500 cycles per second is about 6 decibels above the general level for all tones below 1,000 cycles. According to the manufacturer's curves, the distortion is not more than 11 per cent at inputs of 80 decibels or less, tested at 400, 600, 800, 1,000, 1,500, 2,000, 2,500, 3,000 and 3,500.



Otarion Hearing Aid Model E-4

Performance Tests.—Two subjects, both veteran users of hearing aids, participated in performance tests of this instrument. Subject A, aged 37, suffers from a mixed deafness with considerable high tone hearing loss. His loss for speech is 47 decibels. Subject B, aged 39, has a pure conductive deafness with a nearly flat audiogram. Her loss for speech is 49 decibels. For both subjects full volume and tone control "1 dot," i. e., minimum low tone suppression, was used. The acoustic gain for subject A was 48 decibels, for subject B, 50 decibels. The aided threshold of each subject is, therefore, 1 decibel better than normal. It is therefore possible that the maximum acoustic gain of the instrument is even greater than could be measured with these subjects. The low aided threshold is indirect evidence of absence of excessive internal electrical noise. The acoustical gain is obviously far more than the minimum requirement.

Discrimination tests with the same two subjects consisted of a phonetically balanced list of 100 monosyllables (recorded version) delivered at 60 decibel input level. The resulting levels of the subjects were 43 and 40 decibels respectively above their No. 9 thresholds. The scores are as follows:

	Amplification Without Hearing Aid	Own Aid	Reference Instrument	Model E-4	Difference
Subject A	92	71	85	89	+ 4
Subject B	94	77	76	88	+12
			Average		+ 8

It is noteworthy that the service booklet contains a wiring diagram of the instrument and a list of the parts with specifications and a functional diagram of the switches and controls. The service information begins: "In case of trouble, take your Otarion to the nearest *first class* radio repair shop, preferably one which is an Authorized *Otarion Service Station.* Any *skillful radio repair man* already has most of the equipment and knowledge necessary to give proper service on your hearing aid. Otarion can furnish the rest."

The Council on Physical Medicine and Rehabilitation voted to include the Otarion Hearing Aid, Model E-4, in its list of accepted devices.

APPROVED INTERNSHIPS AND RESIDENCIES IN THE UNITED STATES

ANNUAL REPORT ON INTERNSHIPS AND RESIDENCIES BY THE COUNCIL ON MEDICAL EDUCATION AND HOSPITALS OF THE AMERICAN MEDICAL ASSOCIATION

Edward H. Leveroos, M.D., William R. Albus, M.D., and William W. Corbett, M.D.

The approved internship and residency lists are again being published in a special Internship and Residency Number of THE JOURNAL. They include changes in and additions to the lists as of May 1, 1949. Subsequent changes will appear in the Educational Number of THE JOURNAL, scheduled for publication in September.

The 1949 internship list includes data on all hospitals presently approved by the Council for intern training. Approved hospitals are listed geographically followed by information relating to the type of ownership or control, the bed capacity, number of annual admissions, percentage of service cases, type of internship offered, length of program, number of positions available, affiliated assignments, outpatient service, autopsy rate and monthly stipend. In view of the general acceptance of the Cooperative Plan for Appointment of Interns (see Organization Section), the column indicating date of assignment, which appeared in previous lists, has been deleted. The list again indicates hospital affiliation with one or more medical schools, as a major teaching unit or one involving limited assignments for junior or senior clerks. The report which follows summarizes the data presented in the approved lists.

Hospitals approved for residency training are presented according to the various specialty fields. In each category, hospitals are listed alphabetically by city and state, with the name of the chief of service, the volume of teaching material, the number of residencies, date of assignment and monthly stipend. In a number of specialties, training programs are listed as approved for a specified number of years. In these specialties, each board concerned has indicated that it will accept training for the number of years listed, toward satisfying its requirements for certification. Approval in all fields in which specialty boards have been established is extended by the Council in concurrence with the respective American board.

These lists are published annually, primarily for the guidance of physicians seeking internship and residency appointments. The information is made available through the generous cooperation of the approved hospitals, medical schools, specialty boards and the federal services; to them and to the individual administrators, directors, staff physicians and others whose assistance has made possible the publication of these data, grateful acknowledgment is made.

NUMBER OF INTERNSHIPS

Since the publication of last year's Internship and Residency Number, the Council has approved an additional 39 hospitals for intern training. With an equal number removed from the list during the year, however, the total number approved remained at 807 hospitals. These include 37 under federal control, 118 governmental hospitals other than federal, 15 proprietary, 305 church sponsored and 332 organized on a nonprofit basis. Hospitals engaged in intern training are now listed in all but four states; in addition 1 hospital in the Canal Zone, 1 in Guam, 4 in Hawaii and 6 in Puerto Rico are Council approved. A further analysis of the hospitals approved discloses that 209 are affiliated with medical schools as a major or minor teaching unit, while 598 have organized their programs independently. For purposes of this list, a hospital has been designated as a teaching hospital if its inpatient services are used by junior or senior medical students for clinical clerkships.

These 807 approved hospitals offer a total of 9,124 internships. Of this number 500 internships are offered by the federal services, with the Navy listing 189, the Army 157, the Public Health Service 124, and the other Federal Security Agency hospitals 30. These figures are based on information as of Sept. 1, 1948. While teaching hospitals constituted 25.5 per cent of the total number of hospitals approved, they offered 47.4 per cent of the internships available, or 4,325 of the total number of 9,124 listed.

Three states, New York, Illinois and California, led the rest with 1,537, 676 and 620 internships offered, respectively. Outside the United States, 16 positions were available in the Canal Zone, 46 in Hawaii and 35 in Puerto Rico. Information about the number of positions offered in the one approved hospital in Guam was not available.

INTERNSHIP VACANCIES

The number of hospitals approved for intern training has increased by 10.0 per cent during the past ten years, while the number of internships offered has risen by 16.4 per cent during the same period. The number of medical school graduates meanwhile has not increased proportionately, with the result that approximately 20 per cent of internships offered have remained vacant. The changes in the relations of the number of internships offered to the number of physicians available are presented in table 1.

The teaching hospitals, with 4,325 positions available, reported that 365 of these were not filled as of Sept. 1, 1948, or 8.4 per cent of the total number offered. The nonteaching group, on the other hand, reported 1,446 position vacancies, representing 30.1 per cent of the internships offered. The vacancy percentage for both categories was 19.7 per cent; this compared with 20.5

per cent vacancies reported the previous year. The federal hospitals showed a low vacancy rate with only 21 internships of a total of 500 reported vacant.

While a detailed review of internship vacancies has not been attempted this year, it is evident that there has been little change in the distribution of intern appointments during the past reporting period. The number of vacancies reported in teaching hospitals increased from 348 to 365; those in nonteaching hospitals increased from 1,433 vacancies to 1,446. The apparent inconsistency in the increased number of vacancies and the decreased vacancy percentage reported for 1949 is due to the smaller number of hospitals which furnished data on which the 1948 report was based.

If the number of vacancies, 1,811, reported by approved hospitals during the past year, is deducted from the number of internships offered, 9,124, the difference, 7,313, should represent the number of interns actually assigned. In fact, the 807 approved hospitals reported 7,068 interns on duty as of Sept. 1, 1948. The discrepancy between these two figures is due in part to incomplete data furnished by a number of hospitals. A further analysis of internship vacancies, listing the number of hospitals approved, number of internships offered, number of vacancies reported and the percentage of vacancies by states is presented in table 2.

TABLE 1.—*Approved Hospitals, Internships and Medical School Graduates, 1939-1949*

Year*	Number of Hospitals	Number of Internships	Number of Graduates	
1939	734	7,833	5,089	
1940	732	7,998	5,097	
1941	735	8,182	5,275	
1942	740	8,353	5,163	
1943	760	8,180	5,233	
1944†	766	5,392	10,303‡	
1945	785	8,429	5,136	(to June 30)
1946	798	8,584	5,826	(to May 31)
1947	764	8,539	6,389	(to June 30)
1948	807	9,118	5,543	(to June 30)
1949	807	9,124	5,157	(Estimated)

* Year of publication.
† Quota year.
‡ Includes 2 classes.
(U. S. Army, U. S. Navy hospitals and those outside the United States not included in 1938-1947 figures.)

LENGTH OF INTERNSHIP

A significant factor contributing to the increasing shortage of interns in approved hospitals is the decrease in the number of eighteen month and two year internships, with a consequent increase in the annual demand for interns by hospitals which formerly offered appointments only on alternate years. The uncertain situation relative to military service by physicians who have completed a year of intern training may have resulted in fewer hospitals' reorganizing their training programs on a two year basis. Of the total number of hospitals approved, 184 teaching and 547 nonteaching hospitals offered training of one year's duration. Less than 10 per cent of the 807 hospitals approved have in effect programs of more than twelve months' duration, with 33 teaching hospitals and 38 nonteaching offering an internship in excess of one year. Five hospitals reported varying lengths of training, apparently dependent on the requirements of the interns appointed.

Since the number of interns reported serving in approved hospitals exceeded the number of 1948 graduates by 1,525, it is evident that a significant number of interns are accepting appointments for a second year of training. While graduates of foreign medical schools are included in the total number serving, it is estimated that they do not number more than 300 annually. It can be estimated that if one third of the internships presently listed as one year programs could be reorganized on a two year basis, the number of physicians required to fill all approved positions would be approximately equal to the number of interns presently available.

TABLE 2.—*Internships Offered and Number of Vacancies by States (1948-1949)*

State	Number of Hospitals Approved	Number of Internships Offered	Number of Vacancies Reported	Percentage of Vacancies
Alabama	5	58	7	12.0
Arizona	5	23	5	21.7
Arkansas	2	36	10	27.7
California	50	719	50	6.9
Colorado	11	95	11	11.5
Connecticut	18	197	37	18.8
Delaware	2	23	5	21.7
Dist. of Columbia	11	191	26	13.6
Florida	8	59	22	37.3
Georgia	8	114	20	17.5
Idaho	0	0	0	....
Illinois	63	696	139	18.5
Indiana	17	175	63	36.0
Iowa	10	72	34	47.2
Kansas	7	55	31	56.4
Kentucky	9	87	45	51.7
Louisiana	12	228	61	26.7
Maine	4	24	2	8.3
Maryland	21	300	40	13.0
Massachusetts	39	419	53	12.6
Michigan	31	368	77	20.9
Minnesota	15	181	19	10.5
Mississippi	2	16	12	75.0
Missouri	24	299	50	16.7
Montana	1	6	0	....
Nebraska	9	51	20	39.2
Nevada	0	0	0	....
New Hampshire	1	9	0	....
New Jersey	40	324	61	18.8
New Mexico	0	0	0	....
New York	107	1,500	163	10.2
North Carolina	10	124	23	18.5
North Dakota	4	11	5	45.5
Ohio	44	478	128	26.7
Oklahoma	5	48	13	27.1
Oregon	6	69	12	17.4
Pennsylvania	75	803	168	20.9
Rhode Island	5	32	6	18.7
South Carolina	6	64	12	18.7
South Dakota	3	21	9	42.9
Tennessee	13	157	47	29.9
Texas	22	241	112	46.4
Utah	6	50	11	22.0
Vermont	2	13	1	7.7
Virginia	15	138	50	36.2
Washington	17	134	27	20.1
West Virginia	8	43	13	30.2
Wisconsin	23	180	69	38.3
Wyoming	0	0	0	....
	795*	9,027*	1,779*	19.7*

*Excludes 12 territorial approved hospitals.

TYPE OF INTERNSHIP

The Council approves three types of internships; rotating, which provide supervised experience in the major clinical divisions, internal medicine, surgery, obstetrics and pediatrics, together with training in anesthesia, pathology and roentgenology; mixed, which provide supervised experience in two or more, but not all of the clinical divisions; and straight, which provide supervised experience in but a single major division, including limited training in one or more of its related subspecialties. The present revision of the Essentials of an Approved Internship contains the statement that the Council considers that the rotating type of internship is most likely to provide the best basic training for either the future general practitioner or the specialist.

Of the 807 conducting approved intern programs, 676 or 83.7 per cent offer rotating internships; 37 hospitals, or 4.6 per cent, provide training in a single department, and 21 hospitals, or 2.6 per cent, offer the mixed type of training. The remaining 73 hospitals, comprising 9.1 per cent of the total number approved, offer a combination of the several types of internship. Straight internship services are limited almost without exception to hospitals affiliated with medical schools. In these instances, the participation by the intern in the general educational activities of the medical school compensates, in a measure, for the more limited experience provided during his training period.

AUTOPSY RATE

The autopsy requirement has been raised to 20 per cent in the new Essentials of an Approved Internship. Of the 807 hospitals presently approved, 761 reported rates in excess of this requirement. The remaining 46 hospitals, which reported rates of 15 to 19 per cent, meeting the previous minimum standard, will be expected to increase the number of necropsies performed to the present required rate. Reevaluation of the hospital's approved status is indicated when it fails to meet the minimum standard for two consecutive years.

In previous years, nonfederal hospitals which reported an autopsy rate of 70 per cent or more were included in a special list in Hospital or Educational Numbers of THE JOURNAL. Beginning this year, a list of twenty federal and twenty nonfederal hospitals reporting the highest autopsy percentages will be given recognition in a separate table. The hospitals so recognized for 1949 are found in table 3. In the nonfederal group, all these hospitals maintained a necropsy rate of 75 per cent or better for the reporting period. In the federal group, two hospitals maintained a 100 per cent rate for the entire year; four hospitals listed in this group, however, fell below the 75 per cent minimum established by the nonfederal hospitals.

STIPENDS

Of those hospitals which offered stipends in addition to maintenance, the salaries ranged from $9 to $205 per month in teaching hospitals and from $8.33 to $250 per month in the nonteaching group for the past year.

Excluding federal hospitals from consideration, 104 approved hospitals (13 per cent) paid no salary to the intern staff, with 62 teaching hospitals and 42 nonteaching hospitals reporting that they offered maintenance only; 93 teaching hospitals and 232 nonteaching (40 per cent) paid $50 or less; 21 teaching and 249 nonteaching hospitals (33 per cent) offered amounts from $51 to $100 per month, while the remaining 71 (9 per cent) paid amounts in excess of $100. The 37 government hospitals (5 per cent) stipulated salaries based on government pay scales.

In the teaching group, 87 per cent (155 hospitals) offered stipends of $50 per month or less. Of the nonteaching hospitals, 316, or 54 per cent, paid salaries in excess of $50 monthly. There was an appreciable increase in the number of hospitals paying salaries of more than $100 during the past year, with 51 hospitals so listed in 1948 and 71 hospitals, including 3 teaching, in this category for 1949.

TABLE 3.—*Internship Hospitals with Highest Autopsy Rates*

	FEDERAL		NONFEDERAL	
1.	U. S. Naval Hospital, Charleston, S. C.	100.0	University of Nebraska Hospital, Omaha	94.4
2.	U. S. Naval Hospital, Bremerton, Wash.	100.0	Research and Educational Hospital, Chicago	88.0
3.	Letterman General Hospital, San Francisco	92.7	Northern Permanente Hospital, Vancouver, Wash.	88.0
4.	Madigan General Hospital, Ft. Lewis, Wash.	90.7	Evanston Hospital, Evanston, Ill.	87.7
5.	Walter Reed General Hospital, Washington, D. C.	90.2	Childrens Hospital, Los Angeles	87.5
6.	Fitzsimons General Hospital, Denver	87.5	Beverly Hospital, Beverly, Mass.	86.1
7.	Oliver General Hospital, Augusta, Ga.	86.7	City Hospital, Cleveland	86.1
8.	Brooke General Hospital, San Antonio, Texas	84.4	Ohio State University Hospital, Columbus, Ohio	84.4
9.	U. S. Naval Hospital, Great Lakes, Ill.	81.3	Mary Hitchcock Memorial Hospital, Hanover, N. H.	84.0
10.	Tripler General Hospital, Moanalua (Honolulu), T. H.	80.0	George F. Geisinger Hospital, Danville, Pa.	82.6
11.	U. S. Naval Hospital, Bethesda, Md.	76.3	Hospital of University of Pa., Philadelphia	81.3
12.	U. S. Marine Hospital, Galveston, Texas	76.0	Barnes Hospital, St. Louis	80.4
13.	U. S. Marine Hospital, San Francisco	75.7	Massachusetts Memorial Hospital, Boston	79.8
14.	U. S. Naval Hospital, Mare Island, Calif.	75.5	Colorado General Hospital, Denver	79.6
15.	U. S. Naval Hospital, San Diego, Calif.	75.4	Childrens Hospital, Boston	79.2
16.	U. S. Marine Hospital, Seattle	75.1	Ravenswood Hospital, Chicago	78.9
17.	U. S. Marine Hospital, Chicago	73.6	Loretto Hospital, Chicago	78.5
18.	U. S. Naval Hospital, Portsmouth, Va.	73.5	University of Minnesota Hospitals, Minneapolis	75.5
19.	U. S. Marine Hospital, New Orleans	67.5	St. Barnabas Hospital, Minneapolis	75.1
20.	U. S. Marine Hospital, Boston	65.4	Mount Sinai Hospital, Philadelphia	75.0

APPROVED RESIDENCY PROGRAMS

Since the publication of the 1948 Internship and Residency Number, two additional certifying boards have been approved by the Council on Medical Education and Hospitals and the Advisory Board for Medical Specialties, namely, the American Board of Proctology, and the American Board of Preventive Medicine and Public Health. The Council now lists approved res-

idencies in eighteen specialties and seven subspecialties, in concurrence with the certifying boards concerned. These specialties include anesthesiology, dermatology and syphilology, internal medicine, neurological surgery, neurology, obstetrics and gynecology, ophthalmology, otolaryngology, orthopedic surgery, pathology, pediatrics, physical medicine, plastic surgery, proctology, psychiatry, radiology, surgery and urology; subspecialties include allergy, cardiovascular diseases, contagious diseases, gastroenterology, malignant diseases, pulmonary diseases and thoracic surgery. Programs listed by the Council as approved are accepted by the respective certifying boards in evaluating a candidate's eligibility for Board examination. In ten of the specialties including dermatology and syphilology, neurological surgery, neurology, obstetrics and gynecology, orthopedic surgery, pathology, pediatrics, psychiatry, radiology and urology, programs are listed as approved for a specific number of years of training. In the specialties not listed in this manner, the programs currently are being reappraised to determine whether approval will be continued and, if so, the number of years of training for which approval will be granted. It is anticipated that this information will be made available with the publication of the 1950 Internship and Residency Number.

TABLE 4.—*Approved Residencies and Fellowships—1949*

Specialty	Number of Hospitals	Residencies Offered	Residencies in 1948
Allergy	12	30	47
Anesthesiology	214	650	487
Cardiovascular Disease	22	66	55
Contagious Diseases	19	77	76
Dermatology and Syphilology	79	290	219
Gastroenterology	3	3	3
General Residency	86	216	269
Internal Medicine	504	3,313	2,880
Malignant Diseases	22	110	107
Neurological Surgery	70	183	138
Neurology	68	170	200
Obstetrics and Gynecology	357	1,355	1,145
Occupational Medicine	...	...	...
Ophthalmology and Otolaryngology	180	820	738
Orthopedic Surgery	257	787	718
Pathology	403	1,017	794
Pediatrics	211	959	791
Physical Medicine	39	65	70
Plastic Surgery	18	38	47
Proctology	12	23	28
Psychiatry	253	1,595	1,618
Pulmonary Diseases	128	445	418
Radiology	359	897	833
Surgery	562	3,543	2,977
Thoracic Surgery	42	165	107
Urology	204	468	407
Totals	4,124*	17,293	15,172

* Number of residency programs in 1,187 hospitals approved for residency training.

For the last time this year, hospitals are being listed as approved for "general" or "mixed" residency training. This category is being discontinued with the publication of the 1949 list. In its place, the Council has outlined requirements for a residency in general practice. It should be noted, that hospitals requesting approval under this classification, are expected to meet the same general requirements as do those approved for residency training in the specialties. Hospitals currently listed as approved for general residency training, desiring continued approval under the new classification, will be expected to reorganize their programs in conformity with the essentials of an approved residency in general practice.

The approval of hospitals for residency training on a temporary basis, pending inspection, has been discontinued by joint action of the Council and the Advisory Board of Medical Specialties. Hospitals listed as approved on this basis are being inspected as rapidly as possible. Residents under contract in a hospital approved on a temporary basis will not be affected in the event approval is terminated following inspection but will be considered as having served an acceptable residency. Full approval following inspection will be extended to those hospitals which meet the requirements in the specialty contained in the Essentials of Approved Residencies and Fellowships.

NUMBER OF RESIDENCIES

Facilities for residency training in the specialties continue to expand. With few exceptions, the number of hospitals approved for residency training has increased during the past year. Hospitals approved in anesthesiology showed the most marked increase with a 40 per cent rise in the number of hospitals training residents in this specialty. Hospitals conducting residency programs in pathology rose from 328 in 1948 to 404 this year, an increase of 23 per cent. While the number of approved hospitals increased, the number of residencies offered decreased in some instances. Residencies offered in psychiatry were slightly below last year's figure, with 1,618 available in 1948 and 1,595 in 1949, although the number of hospitals approved in this specialty increased from 227 to 253 during the same period. The number of residencies offered in general surgery, 3,543, continued to exceed those in any other specialty. Residencies in internal medicine now number 3,313, an increase of 15 per cent over last year. The total number of residencies offered in all categories increased from 15,172 in 1948 to 17,293 in 1949.

The number of approved hospitals rose from 1,102 in 1948 to 1,187 in 1949, an increase of slightly over 7 per cent. The number of residencies offered, however, increased by 2,121 positions, or a rise of 14 per cent. The average number of positions offered per approved hospital rose from 13.7 to 14.6 residencies. This increase, though slight when considering the individual hospital, is significant when cosidered in the aggregate. A comparison of the number of hospitals approved for residency training in each specialty and the number of residencies offered in these hospitals for the years 1948 and 1949 is found in table 4.

RESIDENCY PROGRAMS IN FEDERAL HOSPITALS

In addition to their residency programs in civilian hospitals, the Army and Navy conduct training in the specialties in 6 Army hospitals and 9 Navy hospitals, respectively. Residency training is also provided at 12 U. S. P. H. S. hospitals. Including those available in the Veterans Administration, the federal services currently offer 3,322 residencies in all specialty fields, which represent approximately 19 per cent of the total number available. Two of the federal services have also organized residency programs in general practice which are specifically designed to meet the needs of those officers whose duty assignments will include broad responsibilities in the field of general medicine.

V 14
1949

APPROVED INTERNSHIPS

Council on Medical Education and Hospitals of the American Medical Association

535 North Dearborn Street, Chicago 10

Revised to May 1, 1949

HOSPITALS, 807 INTERNSHIPS, 9,124

The following general hospitals, investigated and approved by the Council on Medical Education and Hospitals, are considered in position to furnish acceptable intern training in accordance with standards adopted by the American Medical Association. Three types of internships are approved by the Council—rotating, mixed and straight:

1. A rotating internship is defined as one which provides supervised experience in internal medicine, surgery, pediatrics, obstetrics and their related subspecialties, together with experience in laboratory and radiologic diagnosis.

2. A mixed internship is defined as one which provides supervised experience in two or more, but not in all, of the clinical divisions named.

3. A straight internship is defined as one which provides supervised experience in a single department, although it may include limited opportunity for work in a related subspecialty. Straight internships are now approved in internal medicine, surgery, pediatrics, obstetrics (with or without gynecology) and pathology.

Hospitals approved for internships that are used by medical schools for undergraduate clinical clerkships on inpatient services have been identified in the following lists by the symbols **X** and **x**. Hospitals have been identified with symbol **X** when a medical school has indicated that the hospital is a major unit in the school's teaching program. Hospitals have been identified with the symbol **x** when a medical school has indicated that the hospital is used to a limited extent in the school's teaching program. Certain internships in hospitals designated as teaching hospitals may not provide for assignments to teaching services. Other internships may provide for only a portion of the internship period being spent on teaching services. Prospective interns desiring specific information concerning internship assignments to teaching services in a hospital are advised to communicate with the dean of the medical school with which the hospital is affiliated. Medical school affiliations are indicated by footnotes 10 to 80 placed immediately after the symbol **X** or **x**. The list of medical schools appears on page 171.

The plus (+) sign indicates additional approval for residencies in specialities, as shown in the Council's list of Approved Residencies and Fellowships for Veteran and Civilian Physicians. The hospitals approved for intern training are likewise accredited for general residencies which represent general house staff assignments following the internship. This category will be discontinued effective July 1, 1950. In the interim, hospitals approved for general residency training will be reappraised on the basis of the recently adopted requirements for residency training in general practice.

Name of Hospital	Location	Bed Capacity	Total Patients Admitted	Type of Internships	Length of Service in Months	Internship Offered	Affiliated Service	Outpatient Service	Autopsy Percentage
UNITED STATES ARMY									
Letterman General Hospital +[2]	San Francisco, Calif.	2,185	10,628	R	12	24	No	Req	93
Fitzsimons General Hospital +[2] x18	Denver, Colo.	2,695	15,510	R	12	24	No	Req	88
Walter Reed General Hospital +[3] x18-19	Washington, D. C.	2,100	10,478	R	12	36	No	Req	90
Oliver General Hospital +[2] x22	Augusta	1,500	8,250	R	12	24	No	Req	86
Brooke General Hospital +[3]	San Antonio, Tex.	1,900	29,218	R	12	25	No	None	84
Madigan General Hospital +	Ft. Lewis, Wash.	1,300	10,873	R	12	..	No	Req	91
Gorgas Hospital +	Ancon, Canal Zone	See Gorgas Hospital, Ancon, Canal Zone, page 170							
Tripler General Hospital +	Moanalua (Honolulu), Hawaii	1,449	8,942	R	12	24	No	Req	80
UNITED STATES NAVY									
U. S. Naval Hospital +[3]	Long Beach, Calif.	1,350	21,186	R	12	21	No	Req	65
U. S. Naval Hospital	Mare Island, Calif.	650	5,740	R	12	4	...	....	76
U. S. Naval Hospital +[3]	Oakland, Calif.	1,750	17,320	R	12	19	No	Req	61
U. S. Naval Hospital +	San Diego	1,650	21,354	R	12	19	No	Req	75
U. S. Naval Hospital +	Jacksonville, Fla.	500	5,283	R	12	2	No	Req	49
U. S. Naval Hospital +	Pensacola, Fla.	350	4,120	R	12	4	No	Req	65
U. S. Naval Hospital +[3]	Great Lakes, Ill.	1,100	9,039	R	12	12	No	Req	81
U. S. Naval Hospital + x18	Bethesda, Md.	1,350	15,573	R	12	25	No	None	76
U. S. Naval Hospital +[1]	Chelsea, Mass.	725	6,550	R	12	12	No	None	65
U. S. Naval Hospital +[3]	St. Albans, N. Y.	1,500	7,238	R	12	22	No	Req	75
U. S. Naval Hospital +[1-3]	Philadelphia, Penn.	1,200	16,315	R	12	20	No	Req	41
U. S. Naval Hospital +	Newport, R. I.	720	27,870	R	12	4	No	Req	56
U. S. Naval Hospital	Charleston, S. C.	633	4,929	R	12	5	No	....	100
U. S. Naval Hospital +[3]	Portsmouth, Va.	1,100	12,220	R	12	8	No	None	74
U. S. Naval Hospital	Bremerton, Wash.	550	5,983	R	12	6	No	Req	100
U. S. Naval Hospital	Agana, Guam	450	4,970	R	12	..	No	None	..
UNITED STATES PUBLIC HEALTH SERVICE									
U. S. Marine Hospital +[3]	San Francisco, Calif.	548	5,601	R	12	12	(113)	Req	75
U. S. Marine Hospital +[3]	Chicago, Ill.	366	2,790	R	12	8	(196)	Req	74
U. S. Marine Hospital +[1-3]	New Orleans, La.	558	6,734	R	12	12	No	Req	68
U. S. Marine Hospital +[1-3]	Baltimore, Md.	500	8,474	R	12	12	(137)	Req	81
U. S. Marine Hospital +[3]	Boston, Mass.	372	3,708	M	12	9	No	Req	66
U. S. Marine Hospital +[1]	Detroit, Mich.	267	2,681	R	12	6	(149)	Req	52
U. S. Marine Hospital +[1-3]	Stapleton, S. I., N. Y.	1,033	12,672	R	12	31	(194)	Req	63
U. S. Marine Hospital +[1-3]	Cleveland, Ohio	287	2,948	R	12	6	(195)	Req	48
U. S. Marine Hospital x72	Galveston, Texas	302	3,301	R	12	6	(179)	Req	76
U. S. Marine Hospital [5]	Norfolk, Va.	419	5,688	R	12	10	(184)	Req	51
U. S. Marine Hospital +[1-3]	Seattle, Wash.	400	5,536	R	12	12	No	Req	75
FEDERAL SECURITY AGENCY									
Freedmen's Hospital +[1-3] X20	Washington, D. C.	502	6,959	R	12	18	No	Req	34
St. Elizabeth's Hospital +[1-3] x18-19	Washington, D. C.	6,400	1,406	R	12-24	12	(121)	None	60

Abbreviations and other references will be found on pages 171 and 172.

Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
ALABAMA												
Carraway Methodist Hospital [+1]	Birmingham	Church	225	7,751	95	R	12-24	8	No	Req	30	$75
Jefferson-Hillman Hospital [+1-3] X10	Birmingham	State	566	21,818	55	R	12	32	No	Req	36	25
South Highlands Infirmary	Birmingham	Corp	146	5,553	15	M	12	2	No	Req	30	132
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company [+]	Fairfield	NPAssn	285	8,675	100	R	12	8	No	Req	47	75
City Hospital [+]	Mobile	CyCo	300	7,446	80	R	12	8	No	None	42	50
ARIZONA												
Good Samaritan Hospital [1]	Phoenix	Church	222	10,104	...	R	12	4	No	None	50	100
St. Joseph's Hospital [+]	Phoenix	Church	190	8,330	10	R	12	6	No	None	49	40
St. Monica's Hospital and Health Center [+]	Phoenix	Church	219	6,921	...	R	12	5	(104)	Req	40	75
St. Mary's Hospital and Sanitarium [+]	Tucson	Church	221	6,981	...	R	12	3	(105)	Req	39	50
Tucson Medical Center [+1]	Tucson	NPAssn	192	5,001	...	R	12	5	(105)	Req	49	100
ARKANSAS												
Arkansas Baptist Hospital [+] X11	Little Rock	Church	271	10,132	...	R	12	12	(106)	Req	24	75
University Hospital [+] X11	Little Rock	State	200	4,392	100	R	12	24	(107)	None	50	50
CALIFORNIA												
Herrick Memorial Hospital [+]	Berkeley	NPAssn	185	7,241	5	R-M	12	6	No	Req	60	35
San Joaquin General Hospital [+]	French Camp	County	570	12,340	100	R	12	12	No	Req	67	128
General Hospital of Fresno County [+]	Fresno	County	547	8,890	100	R	12	14	No	Req	31	150
Glendale Sanitarium and Hospital [+] X13	Glendale	Church	225	7,506	...	R	12	8	No	Req	33	140
Loma Linda Sanitarium and Hospital [+] X13	Loma Linda	Church	133	5,003	66	R	12	5	No	Req	60	104
Seaside Memorial Hospital [+]	Long Beach	NPAssn	370	13,6.6	10	R	12	12	(108)	Req	21	50
California Hospital [+]	Los Angeles	Church	317	14,418	64	R	12	13	(109)	Req	48	50
Cedars of Lebanon Hospital [+]	Los Angeles	NPAssn	310	11,224	13	R	12	12	No	Req	38	60
Childrens Hospital [+] X14	Los Angeles	NPAssn	203	6,050	...	S	12	5	(108)	Req	88	40
Hospital of the Good Samaritan [+]	Los Angeles	Church	406	12,249	15	R	12	20	(110)	Req	44	90
Los Angeles County Hospital [+1-3] X13-14	Los Angeles	County	3,394	62,163	100	R	12-24	135	No	None	40	60
Presbyterian Hospital-Olmsted Memorial [+]	Los Angeles	Church	300	11,039	...	R	12	9	(108)	Req	40	60
Queen of Angels Hospital [+]	Los Angeles	Church	302	17,605	...	R	12	14	No	Req	45	50
St. Vincent's Hospital [+]	Los Angeles	Church	238	17,586	100	M	12	8	(111)	Req	61	90
Santa Fe Coast Lines Hospital [+]	Los Angeles	NPAssn	198	4,825	100	R	12	7	No	None	53	50
White Memorial Hospital [+] X13	Los Angeles	Church	207	9,174	48	R	12	17	No	Req	58	91
Highland-Alameda County Hospital [+1-3]	Oakland	County	485	11,433	100	R	12	26	(112)	....	51	...
Permanente Foundation Hospital [+]	Oakland	NPAssn	315	11,572	...	R	12	7	No	None	51	75
Orange County General Hospital [1]	Orange	County	370	3,424	100	R	12	11	No	Req	30	130
Collis P. and Howard Huntington Memorial Hospital [+]	Pasadena	NPAssn	238	9,482	5	R	12	8	No	Req	66	117.50
St. Luke Hospital	Pasadena	Church	145	6,783	...	R	12	..	...	None	36	..
Riverside County Hospital [1-3]	Riverside	County	330	3,624	100	R	12	8	No	Req	38	156
Sacramento County Hospital	Sacramento	County	375	9,828	...	R	12	9	No	Req	30	105
San Bernardino County Charity Hospital [+] X13	San Bernardino	County	343	4,922	100	R	12	10	No	Req	55	110
Mercy Hospital [+]	San Diego	Church	325	13,316	...	R	12	6	No	None	29	65
San Diego County General Hospital [+]	San Diego	County	1,187	8,754	99	R	12	17	No	Req	37	65
Children's Hospital [+] X12	San Francisco	NPAssn	250	7,702	17	R	12	8	No	Req	64	35
Franklin Hospital [+]	San Francisco	NPAssn	250	7,707	10	R-S	12	10	No	None	41	35
French Hospital [+]	San Francisco	NPAssn	225	6,674	...	R	12	7	No	Req	36	35
Mary's Help Hospital [+]	San Francisco	Church	172	8,115	9	R	12	6	No	Req	51	50
Mount Zion Hospital [+1-3]	San Francisco	NPAssn	163	5,725	12	R	12	8	No	Req	71	25
St. Joseph's Hospital [+]	San Francisco	Church	238	7,573	10	R	12	8	No	None	30	50
St. Luke's Hospital [+]	San Francisco	Church	229	7,688	15	R	12	6	No	Req	39	40
St. Mary's Hospital [+]	San Francisco	NPAssn	371	11,133	...	R	12	13	No	Req	39	50
San Francisco Hospital [+1-3] X12, X15	San Francisco	CyCo	1,306	20,.62	100	R	12	52	(110)	Req	21	55
Stanford University Hospitals [+] X15	San Francisco	NPAssn	358	11,598	43	S	12	15	No	Req	60	25
University of California Hospital [+] X12	San Francisco	State	286	7,891	57	S	12	23	(114)	Req	74	25
Santa Clara County Hospital [+]	San Jose	County	435	5,809	100	R	12	11	No	Req	46	75
St. Francis Hospital	Santa Barbara	Church	91	3,366	...	R	12	3	No	None	28	100
Santa Barbara Cottage Hospital [+]	Santa Barbara	NPAssn	210	6,584	...	R	12	10	(115)	Req	68	50
Santa Barbara General Hospital [1]	Santa Barbara	County	204	1,708	100	R	12	3	(116)	Req	67	50
St. John's Hospital [+]	Santa Monica	Church	108	3,934	...	R	12	4	No	None	35	50
Santa Monica Hospital [1]	Santa Monica	Church	178	9,244	...	R	12	10	(171)	Req	52	50
Harbor General Hospital [+]	Torrance	County	577	5,743	100	R	24	24	(108)	Req	30	60
COLORADO												
Glockner-Penrose Hospital [+]	Colorado Springs	Church	198	3,897	...	R	12	..	...	None	26	..
Mercy Hospital [+]	Denver	Church	266	15,303	4	R	12	8	No	Req	46	30
Porter Sanitarium and Hospital [1]	Denver	Church	130	5,430	10	R	12	6	(117)	Req	48	76
Presbyterian Hospital [+] X16	Denver	Church	160	7,239	...	R	12	5	(172)	Req	60	82.50
St. Anthony Hospital [1]	Denver	Church	220	9,351	4	R	12	3	No	Req	37	50
St. Joseph's Hospital [+]	Denver	Church	270	10,817	...	R	12	4	No	Req	35	50
St. Luke's Hospital [+]	Denver	Church	271	11,144	10	R	12	8	(118)	Req	43	30
University of Colorado Medical Center Colorado General Hospital [+] X16	Denver	State	270	4,913	100	R	12	15	No	Req	80	30
Denver General Hospital [+] X16	Denver	CyCo	580	10,585	100	R	12	16	No	Req	..	30
Corwin Hospital [+]	Pueblo	NPAssn	206	6,176	100	R	12	6	No	Req	53	80
CONNECTICUT												
Bridgeport Hospital [+]	Bridgeport	NPAssn	409	12,025	14	R	12	12	No	None	44	50
St. Vincent's Hospital [1]	Bridgeport	Church	345	11,387	10	R	12	14	No	Req	29	100
Danbury Hospital	Danbury	NPAssn	180	5,356	53	R	12	4	No	None	54	100
Hartford Hospital [+1-3]	Hartford	NPAssn	864	25,110	26	R-M	24	26	No	Req	60	90
J. J. McCook Memorial Hospital [+]	Hartford	City	281	4,158	100	R	12	6	No	Req	38	90
St. Francis Hospital [+1-3]	Hartford	Church	550	18,024	23	R	12	20	No	Req	32	35
Meriden Hospital [1]	Meriden	NPAssn	146	5,377	9	R-S	12	5	(119)	Req	40	100
Middlesex Hospital [1]	Middletown	NPAssn	150	4,895	19	R	24	6	(120)	None	44	100
New Britain General Hospital [+]	New Britain	NPAssn	257	7,377	16	R	12	6	No	None	49	50
Grace-New Haven Community Hospital Grace Unit [+]	New Haven	NPAssn	230	6,632	34	R	12	6	No	Req	41	25
New Haven Unit (University Service) [+1-3] X17	New Haven	NPAssn	534	11,336	51	S	12-18	35	No	Req	58	..
Hospital of St. Raphael [+]	New Haven	Church	370	11,838	...	M	24	20	No	Req	25	30
Lawrence and Memorial Assoc. Hospitals [+]	New London	NPAssn	218	6,910	25	R	12	4	No	None	27	106
Norwalk Hospital [+]	Norwalk	NPAssn	237	7,962	7	R	12	6	No	Req	39	117.50
Stamford Hospital [+]	Stamford	NPAssn	217	7,196	11	R	12	9	No	Req	62	100
St. Mary's Hospital [+]	Waterbury	Church	324	9,873	...	R	12	6	No	Req	33	75
Waterbury Hospital [+1-3]	Waterbury	NPAssn	316	12,773	15	R	12	9	No	Req	50	75

Abbreviations and other references will be found on pages 171 and 172.

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Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
DELAWARE												
Delaware Hospital +1-6	Wilmington	NPAssn	376	9,839	18	R	12	14	No	Req	54	75
Memorial Hospital +1 X61	Wilmington	NPAssn	210	5,852	...	R	12	9	No	Req	63	100
DISTRICT OF COLUMBIA												
Central Dispensary and Emergency Hospital +1-3 x19	Washington	NPAssn	310	7,574	30	R	12	14	(121)	Req	52	25
Doctors Hospital +1	Washington	Corp	240	8,839	5	R	12	8	No	None	65	50
Gallinger Municipal Hospital +1-3 X18-19, x20	Washington	City	1,416	22,566	...	S	12	44	No	Req	49	75
Garfield Memorial Hospital +1 x19	Washington	NPAssn	323	10,251	20	R	12	13	No	Req	59	15
Georgetown University Hospital +1 X18	Washington	Church	328	8,274	17	S	12	10	No	Req	47	25
George Washington University Hospital +1 X19	Washington	NPAssn	400	3,941	6	S	12	17	No	....	66	25
Providence Hospital +1 x18	Washington	Church	340	11,331	13	R	12	10	No	Req	70	50
Sibley Memorial Hospital +1	Washington	Church	265	11,881	...	R	12	9	No	Req	74	50
FLORIDA												
Duval Medical Center +	Jacksonville	County	225	4,762	100	R	12	8	No	Req	57	30
St. Luke's Hospital +	Jacksonville	NPAssn	180	7,597	5	R	12	5	No	None	24	65
St. Vincent's Hospital +	Jacksonville	Church	228	9,685	...	R	12	5	No	Req	50	50
Jackson Memorial Hospital +1-3	Miami	County	533	17,904	31	R	12	24	No	Req	46	34.50
Orange Memorial Hospital 1	Orlando	NPAssn	212	7,411	8	R	12	6	No	None	22	100
Tampa Municipal Hospital	Tampa	City	295	12,026	25	R	12	5	No	Req	22	75
GEORGIA												
Crawford W. Long Memorial Hospital +1	Atlanta	NPAssn	349	17,129	...	R	12	16	(122)	Req	46	50
Georgia Baptist Hospital +1	Atlanta	Church	194	7,009	13	R	12	7	No	Req	30	35
Grady Memorial Hospital +1-3 X21	Atlanta	Counties	610	17,490	100	S	12	30	No	Req	58	10
Piedmont Hospital +1 x21	Atlanta	NPAssn	132	5,872	...	R	12	6	No	None	50	35
St. Joseph's Infirmary +	Atlanta	Church	139	6,675	11	R	12	3	No	Req	32	50
University Hospital + X22	Augusta	City	509	15,311	25	R	12	18	No	Req	17	30
Emory University Hospital +1 X21	Emory University	NPAssn	277	9,555	12	S	12	10	(123)	Req	60	25
ILLINOIS												
MacNeal Memorial Hospital 1	Berwyn	NPAssn	165	7,735	8	M	12	10	No	Req	47	75
Burnham City Hospital 1	Champaign	City	115	5,304	...	R	12	4	No	Req	24	Varies
Alexian Brothers Hospital +1	Chicago	Church	275	4,823	...	R	12	7	(197)	None	52	50
American Hospital +1	Chicago	NPAssn	175	7,617	18	R	12	4	No	Req	41	25
Augustana Hospital +	Chicago	Church	275	9,074	5	R	12	10	No	Req	57	25
Belmont Community Hospital	Chicago	NPAssn	110	4,385	...	R	12	4	No	None	21	100
Chicago Memorial Hospital +1	Chicago	NPAssn	92	3,918	100	R	12	5	No	Req	66	150
Columbus Hospital	Chicago	Church	132	6 625	15	R	12	6	(123)	None	61	100
Cook County Hospital +1-3 X23-24, X25, X80	Chicago	County	3,200	80,162	100	..	24	116	No	Req	26	15
Edgewater Hospital +	Chicago	NPAssn	138	5,180	...	R	12	8	No	None	42	100
Englewood Hospital +	Chicago	NPAssn	157	6,459	...	R	12	6	No	None	27	100
Evangelical Hospital 1	Chicago	Church	195	7,933	...	R	12	7	No	None	14	150
Garfield Park Community Hospital	Chicago	NPAssn	150	5,782	...	R	12	6	No	None	39	100
Grant Hospital +1 x24	Chicago	NPAssn	236	7,698	...	R	12	9	No	Req	58	50
Henrotin Hospital +1	Chicago	NPAssn	100	3,240	...	R	12	4	No	Req	42	75
Holy Cross Hospital	Chicago	Church	125	6,363	...	R	12	2	No	None	31	100
Hospital of St. Anthony de Padua +1	Chicago	Church	217	7,860	...	R	12	9	No	None	33	100
Illinois Central Hospital +1	Chicago	NPAssn	262	6,042	45	R	12	9	No	Req	34	110
Illinois Masonic Hospital +1	Chicago	NPAssn	225	7,378	...	R	12	6	No	Req	60	25
Jackson Park Hospital 1	Chicago	Corp	135	4,778	...	R	12	6	No	None	34	150
Loyola University Hospital Group												
Loretto Hospital +1 X80	Chicago	Church	137	5,131	...	R	12	6	No	None	79	100
University Hospital 1 X80	Chicago		...	...	...	..	..	..	...	....	..	...
Lutheran Deaconess Home and Hospital +1	Chicago	Church	193	8,508	12	R	12	4	No	None	59	75
Mercy Hospital—Loyola University Clinics + X80	Chicago	Church	365	9,901	10	R	12	12	No	None	41	25
Michael Reese Hospital +1 X23, x24, x26	Chicago	NPAssn	573	16,267	18	R	12	36	(125)	Req	70	15
Mother Cabrini Memorial Hospital	Chicago	Church	150	4,574	31	R	12	5	No	None	30	100
Mount Sinai Hospital +1 X23	Chicago	NPAssn	285	9,005	14	R-S	12	15	(125)	Op	44	15
Norwegian-American Hospital +1	Chicago	NPAssn	161	6,072	...	R	12	6	No	None	39	100
Passavant Memorial Hospital +1 X24	Chicago	NPAssn	275	6,520	...	R	12	13	(126)	None	67	..
Presbyterian Hospital + X26	Chicago	NPAssn	435	12,374	10	R-S	12-24	34	No	None	65	..
Provident Hospital +1	Chicago	NPAssn	180	5,900	27	R	12	9	No	None	51	25
Ravenswood Hospital +1	Chicago	NPAssn	183	6,147	...	R-S	12	12	No	None	70	50
Research and Educational Hospitals +1-3 X26	Chicago	State	432	6,791	100	R-S	12-24	22	No	Req	88	..
Roseland Community Hospital	Chicago	NPAssn	101	3,747	...	R	..	4	No	None	30	175
St. Anne's Hospital +1 x80	Chicago	Church	320	10,973	...	R	12	10	No	None	32	100
St. Bernard's Hospital +1	Chicago	Church	189	6,652	...	..	12	5	No	None	32	100
St. Elizabeth's Hospital +1	Chicago	Church	275	9,942	7	R	12	8	No	None	37	100
St. Joseph Hospital +1 X24, x80	Chicago	Church	220	6,201	7	R	12	6	No	Req	60	50
St. Luke's Hospital +1 X24, x26	Chicago	NPAssn	547	15,538	12	R	12	40	No	Req	70	..
St. Mary of Nazareth Hospital + x80	Chicago	Church	263	9,816	100	R	12	8	No	None	43	100
South Chicago Community Hospital 1	Chicago	NPAssn	150	6,475	...	R	12	5	No	None	29	150
Swedish Covenant Hospital +1	Chicago	Church	193	6,222	...	R	12	4	No	Req	28	75
University of Chicago Clinics +1-3 X25	Chicago	NPAssn	326	12,845	100	R-S	12	32	No	Req	..	..
Walther Memorial Hospital 1	Chicago	Church	175	6,282	...	R	12	6	No	None	36	100
Wesley Memorial Hospital +1 X24	Chicago	Church	562	15,699	...	R	12	33	No	None	66	..
Women and Children's Hospital +2	Chicago	NPAssn	115	3,530	13	R	12	4	No	Req	57	50
Woodlawn Hospital +1	Chicago	NPAssn	115	4,367	...	R	12	5	No	Req	60	100
St. Mary's Hospital	East St. Louis	Church	265	6,720	...	R	12	5	No	None	16	150
Evanston Hospital +1 X24	Evanston	NPAssn	250	8,040	5	R	12	18	(199)	Req	88	..
St. Francis Hospital +	Evanston	Church	359	11,282	...	R	12	15	No	None	45	50
Little Company of Mary Hospital + x80	Evergreen Park	Church	200	10,205	...	R	12	4	No	None	25	100
St. Joseph's Hospital	Joliet	Church	302	8,806	...	R	12	6	No	None	23	100
Moline Public Hospital 1	Moline	City	198	6,729	100	R	12	3	No	None	23	100
Oak Park Hospital	Oak Park	Church	148	5,271	...	R	12	5	No	None	32	75
West Suburban Hospital + x26	Oak Park	NPAssn	312	11,617	...	R	12	12	No	Req	49	50
Methodist Hospital of Central Illinois +	Peoria	Church	200	7,191	...	M	12	8	No	None	38	75
St. Francis Hospital +1	Peoria	Church	500	14,382	10	R	12	12	No	Req	47	75
St. Mary's Hospital 1	Quincy	Church	195	5,240	25	R	12	3	No	None	18	75
St. Anthony's Hospital +1	Rockford	Church	265	8,474	...	R	12	6	No	None	40	50
Memorial Hospital 1	Springfield	NPAssn	233	6,306	...	R	12	6	No	None	26	50
INDIANA												
St. Catherine Hospital 1	East Chicago	Church	364	8,858	...	R	12	4	No	None	26	100
Protestant Deaconess Hospital 1	Evansville	Church	340	13,144	10	R	12	4	(127)	Req	25	75
Lutheran Hospital	Fort Wayne	Church	210	6,492	...	M	12	4	No	Req	21	75

Abbreviations and other references will be found on pages 171 and 172.

Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
INDIANA—Continued												
Methodist Hospital [1]	Gary	Church	299	8,449	...	R	12	8	No	None	29	100
St. Mary's Mercy Hospital [•1]	Gary	Church	286	7,484	...	R	12	8	No	None	20	125
St. Margaret Hospital [•]	Hammond	Church	200	10,322	...	R	12	8	No	None	30	150
Indianapolis General Hospital [•1-3] X27	Indianapolis	City	704	10,505	90	R	12	34	(128)	Req	47	70
Indiana University Medical Center [•1-3] X27	Indianapolis	State	584	9,847	85	R	12	35	(129)	Req	69	12.50
Methodist Hospital [•1]	Indianapolis	Church	639	22,505	5	R	12	24	No	None	33	137.50
St. Vincent's Hospital [•1]	Indianapolis	Church	329	12,744	7	R	12	10	No	Req	39	150
St. Elizabeth Hospital [•]	LaFayette	Church	309	8,042	5	R	12	10	(128)	None	39	100
St. Joseph Hospital [1]	Mishawaka	Church	160	3,745	...	R	12	3	No	None	27	..
Ball Memorial Hospital [•1]	Muncie	NPAssn	217	8,751	100	R	12	8	No	None	56	50
Memorial Hospital [•1]	South Bend	NPAssn	217	8,059	...	R	12	6	No	Req	46	100
St. Joseph Hospital [1]	South Bend	Church	184	7,096	4	R	12	2	No	Req	11	100
St. Anthony's Hospital [1]	Terre Haute	Church	185	5,972	...	R	12	3	No	None	17	..
Union Hospital [1]	Terre Haute	NPAssn	182	5,344	9	R	12	4	No	None	20	150
IOWA												
Mercy Hospital [1]	Cedar Rapids	Church	200	7,274	...	R	12	2	No	None	28	100
Jennie Edmundson Memorial Hospital [1]	Council Bluffs	NPAssn	136	4,260	...	R-M	12	3	No	None	23	75
Mercy Hospital [1] X43	Council Bluffs	NPAssn	153	4,382	...	R	12	4	No	None	14	75
Mercy Hospital [1]	Davenport	Church	250	8,512	...	R	12	6	(130)	Req	24	75
Broadlawns Polk County Hospital [•1]	Des Moines	County	106	5,072	100	R	12	8	No	Req	14	75
Iowa Lutheran Hospital [1]	Des Moines	Church	135	5,303	...	R	12	3	(131)	Req	20	100
Iowa Methodist Hospital [•1]	Des Moines	Church	312	11,556	...	R	12	12	No	None	71	75
Mercy Hospital [•1]	Des Moines	Church	190	8,228	...	R	12-24	8	No	None	53	150
University Hospitals [•1-3] X28	Iowa City	State	884	20,235	100	R	12	20	No	Req	61	35
St. Joseph Mercy Hospital	Sioux City	Church	250	9,291	...	R	12	6	No	Req	16	..
KANSAS												
Bethany Hospital [1]	Kansas City	Church	150	5,391	...	R	12	5	No	None	54	50
Providence Hospital [1]	Kansas City	Church	140	5,344	...	R	12	4	No	Req	43	50
St. Margaret's Hospital [•1]	Kansas City	Church	203	5,231	...	R	12	6	No	None	50	75
University of Kansas Medical Center [•1] X29	Kansas City	State	395	8,528	...	R	12	12	No	None	69	25
St. Francis Hospital [•]	Wichita	Church	473	14,879	...	R	12	12	No	None	24	100
Wesley Hospital [•1]	Wichita	Church	325	10,438	...	R	12	10	(132)	Req	40	75
Wichita Hospital [1]	Wichita	Church	140	3,552	...	R	12	6	(133)	Req	29	150
KENTUCKY												
St. Elizabeth Hospital [1]	Covington	Church	308	10,625	6	R	12	12	No	Req	26	75
Good Samaritan Hospital [1]	Lexington	Church	285	8,655	...	R	12	6	No	None	31	75
St. Joseph Hospital [1]	Lexington	Church	300	10,007	15	R	12	8	No	None	39	50
Kentucky Baptist Hospital	Louisville	Church	245	10,892	5	R	12	8	No	None	32	35
Louisville General Hospital [•1] X30	Louisville	CyCo	389	8,309	100	R	12	28	(134)	Req	45	20
Norton Memorial Hospital [•]	Louisville	NPAssn	157	6,244	5	R	12	6	No	None	54	50
St. Anthony's Hospital	Louisville	Church	198	6,082	...	R	12	3	No	None	27	125
St. Joseph Infirmary [•]	Louisville	Church	400	12,468	9	R	12	12	No	Req	49	50
SS. Mary and Elizabeth Hospital	Louisville	Church	202	8,010	...	R	12	4	No	None	22	100
LOUISIANA												
Baptist Hospital [•]	Alexandria	Church	210	8,110	...	R	12	6	No	None	23	..
Charity Hospital of Louisiana [•1-3] X31-32	New Orleans	State	3,200	44,313	100	R	12	120	No	Req	50	10
Hotel Dieu, Sisters' Hospital [•]	New Orleans	Church	301	11,998	4	R	12	12	No	None	60	50
Mercy Hospital-Sonia Memorial	New Orleans	Church	125	6,033	...	R	12	5	No	None	37	100
Southern Baptist Hospital [•1]	New Orleans	Church	350	13,652	8	R	12	16	No	None	41	30
Touro Infirmary [•] X22	New Orleans	NPAssn	381	14,234	...	R	12	20	No	Req	54	10
Highland Sanitarium [1]	Shreveport	Part	102	3,892	...	R	12	4	No	None	31	75
North Louisiana Sanitarium [1]	Shreveport	Corp	140	4,883	...	R-M	12	8	(135)	None	47	75
T. E. Schumpert Memorial Sanitarium	Shreveport	Church	107	5,180	...	R	12	2	No	Req	29	200
Shreveport Charity Hospital [•]	Shreveport	State	650	14,833	100	R	12	24	No	Req	43	20
Tri-State Hospital [1]	Shreveport	Corp	120	5,249	...	R-M	12	4	No	Req	20	100
MAINE												
Eastern Maine General Hospital [•1]	Bangor	NPAssn	251	7,506	...	R	12	6	No	Req	38	25
Central Maine General Hospital [•]	Lewiston	NPAssn	226	5,656	...	R	12	6	No	Req	44	25
St. Mary's General Hospital [1]	Lewiston	Church	155	4,159	...	R-M	12	3	No	Req	45	85
Maine General Hospital [•]	Portland	NPAssn	330	8,401	58	R	18-24	9	No	Req	36	25
MARYLAND												
Baltimore City Hospitals [•1-3] x33, X34	Baltimore	City	1,944	7,407	100	R	12	32	No	Req	59	15
Bon Secours Hospital [•]	Baltimore	Church	150	4,831	13	R	12	3	No	Req	33	30
Church Home and Hospital [•1]	Baltimore	Church	165	5,122	13	R-S	12	7	No	Req	56	25
Franklin Square Hospital [•1]	Baltimore	NPAssn	218	5,335	...	R	12	6	No	Req	49	50
Hospital for Women [•1]	Baltimore	NPAssn	129	4,528	24	R	12	4	(136)	Req	31	25
Johns Hopkins Hospital [•1-3] X33	Baltimore	NPAssn	990	19,598	...	S	12	81	No	Req	74	..
Maryland General Hospital [•1]	Baltimore	Church	242	6,365	6	R	12	8	No	Req	32	25
Mercy Hospital [•1] X34	Baltimore	Church	291	8,785	20	R	12	14	No	Req	43	25
Provident Hospital and Free Dispensary [•1-3]	Baltimore	NPAssn	130	3,147	...	R	12	7	No	Req	25	25
St. Agnes' Hospital [•1]	Baltimore	Church	221	7,032	25	R	12	6	(137)	Req	45	30
St. Joseph's Hospital [•]	Baltimore	Church	250	7,519	22	R	12	8	No	Req	30	25
Sinai Hospital [•1]	Baltimore	NPAssn	311	9,390	21	R-S	12	21	(138)	Req	62	10
South Baltimore General Hospital [•1]	Baltimore	NPAssn	157	5,632	...	R	12	6	No	Req	39	50
Union Memorial Hospital [•1]	Baltimore	NPAssn	341	9,261	28	R	12	17	No	Req	60	..
University Hospital [•1-3] X34	Baltimore	State	435	10,688	54	R	24	24	No	Req	51	..
West Baltimore General Hospital [•1-3]	Baltimore	NPAssn	185	6,253	19	R	12	7	(138)	Req	48	50
Washington County Hospital [1]	Hagerstown	NPAssn	158	6,400	...	R	12	6	No	Req	30	75
Peninsula General Hospital [1]	Salisbury	NPAssn	177	6,567	10	R	12	8	No	Req	30	50
Washington Sanitarium and Hospital [1]	Takoma Park	Church	188	4,237	75	R	12	4	No	Req	32	108
MASSACHUSETTS												
Beverly Hospital [•1]	Beverly	NPAssn	166	5,266	20	R	12	4	No	Req	86	..
Beth Israel Hospital [•] X36-37	Boston	NPAssn	215	5,781	37	S	12	12	(139)	None	68	..
Boston City Hospital [•1-3] X35-36-37	Boston	City	2,376	86,421	100	S	12	110	No	Req	45	..
Carney Hospital [•] X37	Boston	Church	228	6,213	28	S	12	9	No	Req	44	..
Children's Hospital [•1-3] X36, x37	Boston	NPAssn	345	9,250	68	S	12	26	(140)	Req	79	..
Faulkner Hospital [•]	Boston	NPAssn	144	4,558	15	R	12	3	No	None	70	..
Massachusetts General Hospital [•1-3] X36	Boston	NPAssn	526	7,990	100	S	12	23	200	Req	53	..
Massachusetts Memorial Hospital [•1-3] X35	Boston	NPAssn	465	8,149	40	S	6-12-24	22	(141)	Req	80	..
New England Hospital for Women and Children [•2] x37	Boston	NPAssn	193	4,561	36	R-S	12	8	No	Req	59	

Abbreviations and other references will be found on pages 171 and 172.

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Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
MASSACHUSETTS—Continued												
Peter Bent Brigham Hospital +[1] X36	Boston	NPAssn	250	5,133	...	S	12	26	(142)	Req	68	..
St. Elizabeth's Hospital +[1] X37	Boston	Church	256	7,127	12	R	12	8	No	Req	38	25
Brockton Hospital [1]	Brockton	NPAssn	124	3,705	25	R	12	4	No	Req	31	50
Cambridge City Hospital + X37	Cambridge	City	300	5,724	56	R	12	8	No	Req	56	10
Mount Auburn Hospital +[1] X37	Cambridge	NPAssn	221	6,831	14	R	12	6	No	Req	47	..
Truesdale Hospital +	Fall River	NPAssn	170	4,786	...	R	12	6	No	Req	52	35
Union Hospital [1]	Fall River	NPAssn	165	5,216	15	R	12	3	No	Req	26	150
Burbank Hospital [1]	Fitchburg	City	250	6,005	50	R	12	4	No	Req	25	125
Holyoke Hospital [1]	Holyoke	NPAssn	140	3,806	...	R	12	3	No	Req	21	25
Lawrence General Hospital +[1]	Lawrence	NPAssn	190	5,903	15	R	12	3	No	Req	54	50
Lowell General Hospital [1]	Lowell	NPAssn	183	4,714	19	R	12-24	3	No	Req	29	25
St. John's Hospital [1]	Lowell	Church	189	5,566	38	R	12	4	No	Req	41	100
St. Joseph's Hospital	Lowell	Church	133	4,951	17	R	12-24	2	No	Req	21	100
Lynn Hospital +	Lynn	NPAssn	242	7,990	18	R	12	6	No	Req	35	50
St. Luke's Hospital [1]	New Bedford	NPAssn	294	9,821	20	M	12	8	No	Req	35	25
Newton-Wellesley Hospital +[1]	Newton	NPAssn	240	6,569	21	R	12	6	No	Req	46	..
Pittsfield General Hospital	Pittsfield	NPAssn	180	4,661	7	M	12	2	No	Req	22	50
St. Luke's Hospital [1]	Pittsfield	Church	150	4,424	...	R	12	2	No	None	27	100
Quincy City Hospital +[1]	Quincy	City	324	7,873	12	R	12	12	No	Req	36	75
Salem Hospital +[1]	Salem	NPAssn	237	6,800	17	R	12	6	No	Req	63	30
Mercy Hospital [1]	Springfield	Church	340	9,924	14	R	12	6	No	Req	29	40
Springfield Hospital +[1]	Springfield	NPAssn	281	7,861	14	R	12	4	(143)	Req	45	..
Wesson Memorial Hospital [1]	Springfield	NPAssn	112	3,884	12	R	12	3	(144)	None	65	25
Waltham Hospital [1]	Waltham	NPAssn	174	4,469	8	M	12	4	No	Req	30	25
Memorial Hospital +[1-3]	Worcester	NPAssn	269	8,636	30	R	12-24	10	No	Req	50	50
St. Vincent Hospital +	Worcester	Church	242	7,203	13	S	12	8	No	None	48	..
Worcester City Hospital +[1-3] X37, X75	Worcester	City	480	10,266	65	R	24	20	No	Req	32	..
Worcester Hahnemann Hospital [1]	Worcester	NPAssn	118	4,354	6	R	12	4	No	None	22	35
MICHIGAN												
St. Joseph's Mercy Hospital +[1]	Ann Arbor	Church	250	8,065	100	R-M	12	5	No	Req	67	100
University Hospital +[1-3] X38	Ann Arbor	State	999	17,348	...	R	12	41	No	Req	70	85.13
Community Hospital	Battle Creek	NPAssn	100	5,192	...	..	..	..	No	None	43	..
Leila Y. Post Montgomery Hospital +[1]	Battle Creek	Church	175	7,401	...	R	12	2	No	Req	34	100
Charles Godwin Jennings Hospital +	Detroit	NPAssn	83	2,350	...	R	12	4	(145)	None	51	..
City of Detroit Receiving Hospital +[1] X39	Detroit	City	538	17,570	100	R-M	12	40	(146)	Req	41	137.68
Evangelical Deaconess Hospital +[1]	Detroit	Church	185	9,040	...	R	12	6	No	Req	29	125
Grace Hospital +[1]	Detroit	NPAssn	641	25,178	8	R	12	30	No	Req	56	50
Harper Hospital +[1]	Detroit	NPAssn	546	20,967	3	R	12	36	(147)	Req	38	110
Henry Ford Hospital +[1-3]	Detroit	NPAssn	580	17,224	85	R	12	30	No	None	60	170
Mount Carmel Mercy Hospital +[1]	Detroit	Church	400	15,833	20	R	12	12	No	Req	28	100
Providence Hospital +	Detroit	Church	329	13,691	3	R	12	18	(147)	Req	64	125
St. Joseph's Mercy Hospital +[1]	Detroit	Church	185	6,570	4	R	12	6	(201)	Req	32	100
St. Mary's Hospital +[1]	Detroit	Church	294	9,681	4	R	12	12	(148)	Req	42	125
Woman's Hospital +[1]	Detroit	NPAssn	246	9,498	5	R	12	8	(150)	Req	55	85
Wayne County General Hospital and Infirmary +[1] X39	Eloise	County	5,127	7,923	99	R	12	24	(146)	Req	31	205
Hurley Hospital +[1]	Flint	City	413	15,774	...	R	12	16	No	None	31	110
St. Joseph Hospital	Flint	Church	230	10,397	...	R	12	..	....	....	22	..
Blodgett Memorial Hospital +[1]	Grand Rapids	NPAssn	179	5,956	...	R	12	6	(151)	None	55	75
Butterworth Hospital +[1]	Grand Rapids	NPAssn	270	11,881	...	R	12	9	No	Req	50	50
St. Mary's Hospital +	Grand Rapids	Church	276	9,028	3	R	12	8	No	Req	33	100
Highland Park General Hospital +[1]	Highland Park	City	255	8,753	5	R	12	10	No	Req	38	100
W. A. Foote Memorial Hospital	Jackson	City	150	6,512	...	..	..	..	No	None	29	100
Bronson Methodist Hospital +[1]	Kalamazoo	Church	145	5,892	...	R	12	4	No	None	62	100
Edward W. Sparrow Hospital [1]	Lansing	NPAssn	228	9,201	4	R	12	10	(201)	None	56	..
St. Lawrence Hospital [1]	Lansing	Church	210	8,058	...	R	12	8	(153)	None	51	..
Pontiac General Hospital +[1]	Pontiac	City	237	8,643	...	R	12	3	(203)	None	33	50
St. Joseph Mercy Hospital [1]	Pontiac	Church	257	9,163	...	R	12	6	No	Req	29	..
Saginaw General Hospital +[1]	Saginaw	NPAssn	204	9,446	100	R	12	4	No	Req	68	50
St. Mary's Hospital [1]	Saginaw	Church	170	6,909	4	R	12	4	No	None	32	..
MINNESOTA												
St. Luke's Hospital +	Duluth	NPAssn	276	10,160	...	R-S	12	12	(154)	Req	74	25
St. Mary's Hospital +	Duluth	Church	285	10,099	...	R-S	12	11	(154)	Req	66	25
Abbott Hospital +	Minneapolis	Church	126	6,351	...	R	12	3	(155)	None	40	50
Asbury Hospital +	Minneapolis	Church	148	5,885	...	R	12	4	No	None	42	100
Lutheran Deaconess Home and Hospital +[1]	Minneapolis	Church	160	6,346	25	M	12	3	No	None	38	50
Minneapolis General Hospital +[1] X40	Minneapolis	City	574	9,192	100	R	6-12-18	36	No	Req	51	25
Northwestern Hospital +[1]	Minneapolis	NPAssn	260	10,473	...	R-S	12	12	(156)	None	54	50
St. Barnabas Hospital +[1]	Minneapolis	NPAssn	199	8,544	...	R	12	6	No	None	75	100
St. Mary's Hospital +[1]	Minneapolis	Church	353	12,430	100	R	12	10	(156)	None	51	75
Swedish Hospital +[1]	Minneapolis	NPAssn	323	13,788	...	R	12	7	No	None	42	75
University of Minnesota Hospitals +[1] X40	Minneapolis	State	450	9,423	100	S	12	28	No	Req	76	..
Ancker Hospital +	St. Paul	CyCo	850	7,339	95	R	12	24	No	Req	66	30
Bethesda Hospital [1]	St. Paul	Church	162	7,568	...	R	12	5	No	Req	40	100
Charles T. Miller Hospital +[1]	St. Paul	NPAssn	275	8,733	11	R	12	10	(157)	Req	61	50
St. Joseph's Hospital +[1]	St. Paul	Church	256	9,616	2	R	12	10	(158)	Req	44	75
MISSISSIPPI												
Mississippi Baptist Hospital	Jackson	Church	255	11,317	...	R	12	12	No	None	21	50
Mercy Hospital-Street Memorial +[1]	Vicksburg	Church	125	5,943	...	R	12	4	No	None	33	50
MISSOURI												
St. Louis County Hospital +	Clayton	County	216	3,279	...	R	12	8	No	Req	64	50
Kansas City General Hospital No. 1 +[3] x29	Kansas City	City	550	11,074	100	R	12	28	No	Req	57	25
Kansas City General Hospital No. 2 [1]	Kansas City	City	260	4,626	...	R-M	12	9	(204)	Req	52	25
Menorah Hospital +[1]	Kansas City	NPAssn	100	6,869	6	R	12	5	No	None	47	100
Research Hospital +	Kansas City	NPAssn	211	8,029	...	R	12	8	No	None	64	50
St. Joseph Hospital +	Kansas City	Church	321	12,484	10	R	12	8	No	Req	58	100
St. Luke's Hospital +[1]	Kansas City	Church	375	11,232	...	R	12	7	No	None	71	50
St. Mary's Hospital +[1]	Kansas City	Church	170	6,754	...	R	12	5	No	None	59	75
Missouri Methodist Hospital [1]	St. Joseph	Church	225	6,838	...	M	12	4	No	Req	24	150
St. Joseph's Hospital [1]	St. Joseph	Church	149	6,243	...	M	12	2	No	None	10	200
Barnes Hospital +[1-3] X42	St. Louis	NPAssn	685	16,062	...	S	12	18	(160)	Req	80	10
Christian Hospital	St. Louis	NPAssn	125	3,860	...	R	12	3	No	None	32	125
DePaul Hospital +	St. Louis	Church	275	9,022	25	R	12	9	No	Req	27	50
Evangelical Deaconess Hospital [1]	St. Louis	Church	250	8,443	...	R	12	9	No	Req	34	60

Abbreviations and other references will be found on pages 171 and 172.

Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
MISSOURI—Continued												
Homer G. Phillips Hospital [1-3] X42	St. Louis	City	694	15,715	100	R	12	27	(161)	Req	23	70
Jewish Hospital [3]	St. Louis	NPAssn	298	8,488	6	..	12	13	No	Req	42	35
Lutheran Hospital	St. Louis	Church	165	5,899	4	R	12	5	No	None	32	75
Missouri Baptist Hospital [3]	St. Louis	Church	450	11,114	...	R	12	8	No	None	24	35
St. Anthony's Hospital + X41	St. Louis	Church	250	8,239	...	R	12	8	(162)	None	46	50
St. John's Hospital + X41	St. Louis	Church	343	9,317	...	R	12	12	(163)	Req	38	35
St. Louis City Hospital [3-3] X42	St. Louis	City	1,125	17,714	100	R-S	12	56	(164)	Req	47	70
St. Luke's Hospital [3]	St. Louis	Church	184	5,212	5	R	12	9	(165)	Req	50	25
St. Mary's Group of Hospitals [1-3] X41	St. Louis	Church	673	16,316	74	R	12-24	34	No	Req	46	15
St. Mary's Infirmary [1] X41	St. Louis	Church	146	5,777	20	R	12	4	No	None	33	..
MONTANA												
Montana Deaconess Hospital +	Great Falls	Church	190	5,261	...	R	12	6	No	Req	60	50
NEBRASKA												
Bryan Memorial Hospital [1-3]	Lincoln	Church	125	3,415	...	R	12	3	No	None	49	100
Lincoln General Hospital [1-3]	Lincoln	NPAssn	183	6,372	...	R	12	4	No	Req	60	100
St. Elizabeth Hospital [1-3]	Lincoln	Church	230	8,487	25	R	12	2	No	None	29	75
Bishop Clarkson Memorial Hospital [3] X44	Omaha	Church	161	5,455	...	R	12	2	No	None	58	50
Creighton Memorial St. Joseph's Hospital [3] X43	Omaha	Church	460	12,529	7	R	12	16	No	Req	38	25
Immanuel Deaconess Institute [1] X44	Omaha	Church	125	5,169	100	R	12	4	No	None	40	50
Nebraska Methodist Hospital [3] X44	Omaha	Church	167	7,466	...	R	12	3	No	None	55	50
St. Catherine's Hospital [1] X43	Omaha	Church	165	5,918	85	R	12	5	(166)	None	30	55
University of Nebraska Hospital [3] X44	Omaha	State	212	3,094	...	R	12	12	No	Req	95	40
NEW HAMPSHIRE												
Mary Hitchcock Memorial Hospital [3]	Hanover	NPAssn	207	5,574	100	R	12	9	No	None	84	8.33
NEW JERSEY												
Atlantic City Hospital [3]	Atlantic City	NPAssn	280	8,314	50	R	12	12	(167)	Req	33	50
Bayonne Hospital and Dispensary [3]	Bayonne	NPAssn	259	5,992	39	R	12	6	No	Req	23	115
Cooper Hospital [3] X62, X64	Camden	NPAssn	357	10,486	...	R	12	12	No	Req	55	15
West Jersey Hospital [3] X61	Camden	NPAssn	249	9,983	...	R	12	10	No	Req	56	100
East Orange General Hospital [1]	East Orange	NPAssn	139	3,418	100	R	12	4	(168)	Req	26	50
Alexian Brothers Hospital [3]	Elizabeth	Church	150	2,652	16	R	12	4	(169)	Req	17	..
Elizabeth General Hospital and Dispensary [1]	Elizabeth	NPAssn	191	6,144	32	R	12	8	No	Req	25	100
St. Elizabeth Hospital [1]	Elizabeth	Church	230	6,804	50	R	12	7	No	Req	24	100
Englewood Hospital [3]	Englewood	NPAssn	160	8,118	25	R	12-18	6	No	Req	31	50
Hackensack Hospital [3]	Hackensack	NPAssn	250	10,193	29	R	12	10	No	Req	40	50
St. Mary's Hospital [1]	Hoboken	Church	420	6 957	65	R	12	6	No	Req	19	75
Christ Hospital [1-3]	Jersey City	Church	356	6,024	...	R	12	12	No	Req	31	100
Jersey City Hospital [3-3]	Jersey City	City	1,500	25,819	80	R	12-24	50	(165)	Req	35	25
St. Francis Hospital [1]	Jersey City	Church	230	4,133	20	R	12	6	(206)	Req	16	65
Monmouth Memorial Hospital [3]	Long Branch	NPAssn	253	7,348	31	R	12	8	No	Req	28	100
Mountainside Hospital [3]	Montclair	NPAssn	314	7,628	50	R	12-24	8	No	Req	51	48.75
All Souls Hospital	Morristown	Church	123	3,408	10	R	12	3	No	Req	31	..
Morristown Memorial Hospital [1]	Morristown	NPAssn	422	8,763	29	R	12	2	No	Req	29	100
Fitkin Memorial Hospital [3]	Neptune	NPAssn	154	5,508	33	R	12	8	No	Req	29	50
Hospital of St. Barnabas and for Women and Child en [3]	Newark	Church	211	7,484	22	R	12	6	No	Req	44	50
Lutheran Memorial Hospital	Newark	NPAssn	121	4,120	45	R	12	2	No	Req	10	50
Newark Beth Israel Hospital [1-3]	Newark	NPAssn	365	11,702	18	R	12	12	No	Req	40	25
Newark City Hospital [3-3]	Newark	City	700	12,076	100	R	24	24	No	None	27	50
St. Michael's Hospital +	Newark	Church	401	11,072	30	R	12	6	No	Req	25	75
St. Peter's General Hospital [1]	New Brunswick	Church	242	8,082	10	R	12	5	No	Req	17	100
Orange Memorial Hospital +	Orange	NPAssn	460	9,134	23	R	12	8	No	Req	32	35
St. Mary's Hospital	Orange	Church	148	5,393	5	R	12	2	No	Req	25	75
Passaic General Hospital [1]	Passaic	NPAssn	237	6,732	33	R	12	6	No	Req	54	75
St. Mary Hospital [1]	Passaic	Church	190	6,485	25	R	12	2	No	Req	20	60
Nathan and Miriam Barnert Memorial Hospital [1]	Paterson	NPAssn	122	3,860	26	R	12	5	No	Req	36	50
Paterson General Hospital [3]	Paterson	NPAssn	372	9,611	24	R	12	8	No	Req	33	50
St. Joseph Hospital [3]	Paterson	Church	305	8,595	45	R	12	10	No	Req	31	100
Perth Amboy General Hospital	Perth Amboy	NPAssn	225	7,537	11	R	12	5	No	None	23	75
Muhlenberg Hospital [1-3]	Plainfield	NPAssn	270	8,832	15	R-S	12	8	No	Req	27	50
Overlook Hospital [1]	Summit	NPAssn	145	4,478	...	M	12-24	4	No	Req	39	100
Holy Name Hospital [1]	Teaneck	Church	185	7,672	17	R	12-24	8	No	Req	39	75
Mercer Hospital [1]	Trenton	NPAssn	248	7,379	20	R	12	6	No	Range	39	25
St. Francis Hospital +	Trenton	Church	300	8,489	23	R	12	5	No	Req	27	75
William McKinley Memorial Hospital [1]	Trenton	NPAssn	118	3,982	17	R	12	3	No	Req	18	100
North Hudson Hospital [1]	Weehawken	NPAssn	106	3,422	50	R	12	7	(205)	Req	18	100
NEW YORK												
Albany Hospital [1-3] X45	Albany	NPAssn	541	15,099	41	S	12	32	No	Req	60	..
Memorial Hospital [1]	Albany	NPAssn	137	3,863	9	R	12	6	No	Req	54	125
St. Peter's Hospital X45	Albany	Church	139	4,366	7	R	12	7	(207)	Req	33	100
Auburn City Hospital [1]	Auburn	NPAssn	239	7,216	...	R	12	6	No	None	31	75
Binghamton City Hospital [1-3]	Binghamton	City	464	11,177	30	R	12	8	No	Req	54	50
Beth-El Hospital [3]	Brooklyn	NPAssn	242	8,270	44	R	12-24	11	No	Req	47	50
Brooklyn Hospital [3] X46	Brooklyn	NPAssn	330	9,181	34	R	12	9	No	Req	47	..
Bushwick Hospital [1]	Brooklyn	NPAssn	101	4,293	16	R	12	5	No	Req	15	125
Coney Island Hospital [1-3]	Brooklyn	City	270	11,165	100	R	12	16	No	Req	32	50
Cumberland Hospital [1-3]	Brooklyn	City	361	6,842	100	R	24	22	No	Req	52	25
Greenpoint Hospital [1-3] X46	Brooklyn	City	396	6,210	100	R-S	12	14	No	Req	22	35
Jewish Hospital [1-3] X46	Brooklyn	NPAssn	546	15,438	...	R	12	28	(208)	Req	43	15
Kings County Hospital [1-3] X46	Brooklyn	City	2,509	66,742	100	R-S	12-24	72	No	Req	19	25
Long Island College Hospital [3] X46	Brooklyn	NPAssn	381	9,748	28	S	12	19	(209)	Req	34	..
Maimonides Hospital [3] X46												
Beth Moses Division +	Brooklyn	NPAssn	182	4,588	21	S	6-12	8	No	Req	28	35
Israel Zion Division +	Brooklyn	NPAssn	331	11,216	16	S	12	20	No	Req	32	35
Methodist Hospital [3] X46	Brooklyn	Church	456	9,820	39	R-M-S	24	20	No	Req	52	..
Norwegian Lutheran Deaconesses' Home and Hospital [3]	Brooklyn	Church	210	5,707	55	R	12	4	No	Req	38	25
St. Catherine's Hospital [3]	Brooklyn	Church	287	7,579	29	R-S	24	13	No	Req	34	35
St. John's Hospital [3]	Brooklyn	Church	229	4,695	37	R-S	12	9	No	Req	34	70
St. Mary's Hospital +	Brooklyn	Church	237	7,947	50	R-S	24	10	No	Req	39	30
St. Peter's Hospital [1]	Brooklyn	Church	175	3,263	11	R	12	6	No	Req	39	100
Unity Hospital [3]	Brooklyn	NPAssn	236	5,982	22	R	12	8	No	Req	17	100
Wyckoff Heights Hospital [1]	Brooklyn	NPAssn	169	5,119	30	R	12	4	No	Req	24	50

Abbreviations and other references will be found on pages 171 and 172.

Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
NEW YORK—Continued												
Buffalo General Hospital ✦[1-3] **X47**	Buffalo	NPAssn	458	11,221	50	S	12	18	(210)	Req	45	..
Deaconess Hospital ✦[1]	Buffalo	NPAssn	277	9,366	...	R	12	8	No	Req	37	40
Edward J. Meyer Memorial Hospital ✦[1-3] **X47**	Buffalo	County	858	10,777	...	R-M	12	25	(211)	Req	45	91.66
Mercy Hospital	Buffalo	Church	198	7,041	5	R	12	8	No	Req	24	50
Millard Fillmore Hospital ✦ **X47**	Buffalo	NPAssn	473	13,489	...	R	12	15	(212)	Req	47	25
Sisters of Charity Hospital ✦[1]	Buffalo	Church	435	10,128	...	R	12	14	(213)	Req	26	60
Mary Imogene Bassett Hospital ✦[1] **x45, X48**	Cooperstown	NPAssn	100	2,613	100	R-M-S	12-24	8	No	Req	72	50
Arnot-Ogden Memorial Hospital	Elmira	NPAssn	193	6,408	9	R	12	6	(214)	None	37	75
St. Joseph's Hospital [1]	Elmira	Church	253	7,029	12	R	12	4	No	None	22	130
Ideal Hospital [1]	Endicott	City	96	3,005	...	R	12	3	No	None	22	150
Flushing Hospital and Dispensary ✦[1-3]	Flushing	NPAssn	206	9,586	17	R	24	8	No	Req	35	100
Meadowbrook Hospital ✦[1]	Hempstead	County	250	5,868	99	R	12-24	12	No	Req	43	50
Jamaica Hospital ✦[1]	Jamaica	NPAssn	185	6,136	...	R	12 24	8	No	Req	20	75
Mary Immaculate Hospital ✦[1-3]	Jamaica	Church	273	9,051	...	R-S	12	9	No	Req	37	45
Queens General Hospital ✦[1-3] **X50**	Jamaica	City	705	14,557	100	R-S	24	38	No	Req	47	25
Charles S. Wilson Memorial Hospital ✦[1]	Johnson City	NPAssn	360	9,241	...	R	12	8	No	Req	40	100
Our Lady of Victory Hospital [1]	Lackawanna	Church	175	5,224	...	..	12	4	No	Req	18	120
St. John's Long Island City Hospital ✦[3]	Long Island City	Church	230	5,987	55	R	24	18	No	Req	45	50
Nassau Hospital ✦[1]	Mineola	NPAssn	227	7,769	18	R	12	4	No	None	28	75
Mount Vernon Hospital ✦[1]	Mount Vernon	NPAssn	217	7,665	17	R	12	6	No	Req	35	75
St. Luke's Hospital [1-3]	Newburgh	NPAssn	186	5,927	22	R	12	5	No	Req	22	100
New Rochelle Hospital ✦[1]	New Rochelle	NPAssn	312	8,814	...	R	12	10	No	Req	32	100
Bellevue Hospital ✦[1-3] **X48, X51, x49**	New York	City	3,049	58,182	...	R-M-S	12-18-24	148	No	Varies	41	..
Division I—Columbia University ✦[1]					...	M	12-24	10	No	Req	..	45
Division II—Cornell University ✦[1]					...	M-S	12	13	No	Req	..	45
Division III—New York University ✦												
Division IV—New York University ✦												
Beth David Hospital ✦[1-3]	New York	NPAssn	160	4,457	28	R	12-24	15	No	Req	31	50
Beth Israel Hospital ✦[1-3] **x51**	New York	NPAssn	326	9,174	35	R	12	12	No	None	40	25
Bronx Hospital ✦[1-3]	New York	NPAssn	306	9,125	28	R-S	12	10	No	Req	25	35
Columbus Hospital	New York	Church	260	5,414	...	R	18	12	No	None	38	75
Flower and Fifth Avenue Hospitals ✦[1-3] **X50**	New York	NPAssn	337	9,325	32	S	12	13	No	Req	36	..
Fordham Hospital ✦[1-3]	New York	City	414	10,486	100	R	12	24	No	Req	27	50
French Hospital ✦[1]	New York	NPAssn	251	6,465	35	R	24	12	No	Req	37	20
Goldwater Memorial Hospital ✦[1-3] **X48, x51**	New York	City	1,500	1,571	100	M	12	5	No	Req	38	30
Gouverneur Hospital ✦[1-3]	New York	City	172	3,881	100	R	12	7	(215)	Req	16	50
Harlem Hospital ✦[1-3]	New York	City	676	22,267	100	R	12	48	No	Req	19	25
Hospital for Joint Diseases ✦[1-3]	New York	NPAssn	362	5,621	34	R	12-24	12	(216)	Req	38	25
Jewish Memorial Hospital ✦[3]	New York	NPAssn	185	5,810	39	R	12	11	No	Req	40	50
Knickerbocker Hospital ✦[1]	New York	NPAssn	182	4,159	50	M	12	8	No	Req	57	50
Lebanon Hospital ✦[1]	New York	NPAssn	207	6,246	12	R	12-24	11	No	None	36	50
Lenox Hill Hospital ✦[1-3] **x51**	New York	NPAssn	330	12,975	44	R	24	24	No	Req	47	..
Lincoln Hospital ✦[1-3]	New York	City	391	14,967	100	R	12	24	No	None	26	30
Metropolitan Hospital ✦[1-3] **X50**	New York	City	1,000	12,512	100	M-S	12-24	36	No	Req	23	30
Misericordia Hospital	New York	Church	181	5,226	33	R	12	6	No	Req	31	50
Montefiore Hospital for Chronic Diseases ✦[1-3] **X48**	New York	NPAssn	360	4,027	50	M-S	12	13	No	Req	53	25
Morrisania City Hospital ✦[1-3] **X50**	New York	City	466	15,548	100	R	12	24	No	Req	18	30
Mother Cabrini Memorial Hospital [1]	New York	Church	175	3,493	74	R	12-24	6	No	Req	15	50
Mount Sinai Hospital ✦[1-3] **x48**	New York	NPAssn	803	15,986	54	R	12	24	No	None	49	25
New York City Hospital ✦[1-3] **X50**	New York	City	823	12,040	100	R-S	24	24	No	Req	38	35
New York Hospital ✦[1-3] **X49**	New York	NPAssn	1,044	20,743	...	S	12	48	No	Req	49	..
New York Infirmary ✦[2-3]	New York	NPAssn	121	3,176	68	R	12	6	No	Req	55	30
New York Polyclinic Medical School and Hospital ✦[3]	New York	NPAssn	374	9,552	...	R	12	8	No	Req	25	25
Presbyterian Hospital ✦[1-3] **X48**	New York	NPAssn	1,422	30,220	60	M-S	18-24	15	No	Req	55	..
Roosevelt Hospital ✦[1] **X48**	New York	NPAssn	410	9,002	55	M	12-24	12	No	Req	37	..
St. Clare's Hospital ✦[1]	New York	Church	441	9,513	24	R	12	18	No	Req	60	10
St. Francis Hospital [1]	New York	Church	350	7,400	48	R	12	5	No	None	25	50
St. Luke's Hospital ✦[3] **X48**	New York	NPAssn	520	9,829	63	M	12	9	No	Req	50	..
St. Vincent's Hospital ✦[1] **x51**	New York	Church	544	11,887	100	R	12	22	No	Req	42	..
Sydenham Hospital ✦[1-3]	New York	NPAssn	202	5,014	52	R	12	15	No	Req	42	25
University Hospital ✦[1-3]	New York	NPAssn	406	9,429	100	S	12	6	No	Req	49	..
United Hospital [1]	Port Chester	NPAssn	182	6,107	20	R	12	6	No	Req	27	100
St. Francis Hospital [1]	Poughkeepsie	Church	106	2,823	6	R	12	3	No	None	59	200
Vassar Brothers Hospital	Poughkeepsie	NPAssn	207	6,535	28	R	12	5	No	Req	22	100
Genesee Hospital ✦[1] **x52**	Rochester	NPAssn	226	7,850	15	S	12	8	No	Req	64	15
Highland Hospital ✦[1]	Rochester	NPAssn	200	6,906	15	R	12	7	No	Req	51	25
Rochester General Hospital ✦[1]	Rochester	NPAssn	324	14,983	20	R	12	18	(217)	Req	74	60
St. Mary's Hospital ✦[1]	Rochester	Church	325	12,322	8	R	12	12	No	Req	42	50
Strong Memorial–Rochester Municipal Hospitals ✦[1] **X52**	Rochester	NPAssn	746	17,524	54	M-S	12-24	42	(218)	Req	74	15
Ellis Hospital ✦[1] **X45**	Schenectady	NPAssn	350	13,684	5	R-S	12	8	No	Req	41	60
St. Vincent's Hospital [1]	Staten Island	Church	211	7,336	40	R	12	8	No	Req	24	100
Staten Island Hospital ✦[1]	Staten Island	NPAssn	221	5,755	35	R	24	7	No	Req	34	100
Crouse-Irving Hospital ✦[1] **x53**	Syracuse	NPAssn	215	7,969	...	R	12	4	No	Req	27	25
General Hospital ✦[1] **x53**	Syracuse	NPAssn	127	4,843	13	M	12	4	No	Req	34	25
St. Joseph's Hospital [1] **x53**	Syracuse	Church	205	7,915	31	R	12	6	No	Req	17	35
Syracuse University Medical Center Hospitals												
Hospital of the Good Shepherd ✦[1] **X53**	Syracuse	NPAssn	204	4,371	39	R-M	12	8	(219)	None	57	..
Syracuse Memorial Hospital ✦[1] **X53**	Syracuse	NPAssn	276	11,422	26	S	12	23	(219)	None	45	..
St. Mary's Hospital [1]	Troy	Church	244	6,168	8	R	12	6	No	Req	22	90
Samaritan Hospital ✦[1]	Troy	NPAssn	188	5,323	7	R	12	6	No	Req	41	75
Grasslands Hospital ✦[1-3]	Valhalla	County	800	4,424	100	R	12	20	No	Req	68	25
St. Agnes Hospital	White Plains	Church	138	3,676	35	R	12	4	No	Req	46	100
White Plains Hospital ✦	White Plains	NPAssn	188	6,188	15	R	12	3	No	Req	52	50
St. John's Riverside Hospital [1]	Yonkers	NPAssn	188	5,822	...	R-M-S	12	5	No	Req	28	100
St. Joseph's Hospital [1]	Yonkers	Church	184	3,442	24	R-S	12	7	No	Req	22	75
Yonkers General Hospital [1]	Yonkers	NPAssn	143	5,190	10	R	12	5	No	Req	21	100
NORTH CAROLINA												
Charlotte Memorial Hospital ✦[1]	Charlotte	NPAssn	371	10,297	19	R	12	10	No	Req	53	40
Duke Hospital ✦[1-3] **X54**	Durham	NPAssn	549	13,802	52	M-S	12	42	(220)	Req	57	..
Lincoln Hospital [1]	Durham	NPAssn	99	2,732	42	R	12	4	No	Req	13	25
Watts Hospital ✦[1]	Durham	NPAssn	200	8,608	11	R-S	12	14	No	Req	50	25
Rex Hospital ✦[1]	Raleigh	NPAssn	294	10,977	10	R	12	10	No	Req	24	165
St. Agnes Hospital [1]	Raleigh	Church	114	3,294	40	R	12	4	No	Req	15	50
James Walker Memorial Hospital ✦[1]	Wilmington	NPAssn	300	9,955	18	R	12-24	7	No	Req	21	50
City Memorial Hospital ✦[1]	Winston-Salem	City	193	7,100	100	R	12	9	No	Req	35	25
Kate Bitting Reynolds Memorial Hospital ✦[1]	Winston-Salem	City	200	5,821	30	R	12	6	(221)	Req	25	50
North Carolina Baptist Hospital ✦[1-3] **X55**	Winston-Salem	Church	260	7,762	40	S	12	18	No	Req	62	..

Abbreviations and other references will be found on pages 171 and 172.

Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
NORTH DAKOTA												
St. John's Hospital [1]	Fargo	Church	180	6,319	...	R	12	2	No	None	31	75
St. Luke's Hospital [1]	Fargo	Church	127	5,165	...	R	12	4	No	Req	50	50
Grand Forks Deaconess Hospital [1]	Grand Forks	NPAssn	140	4,895	...	R	12	3	No	Req	55	..
Trinity Hospital +	Minot	Church	188	6,600	...	R	12	2	No	None	54	..
OHIO												
City Hospital +	Akron	NPAssn	418	16,047	7	R	12	15	(322)	Req	48	30
Peoples Hospital +[1]	Akron	NPAssn	210	9,526	5	R	12	6	(222)	Req	63	50
St. Thomas Hospital +	Akron	Church	205	9,187	...	R	12	8	(223)	Req	42	75
Aultman Hospital +[1]	Canton	NPAssn	301	10,067	14	R	12	10	No	Req	46	50
Mercy Hospital +	Canton	Church	229	10,432	...	R	12	6	No	Req	35	75
Bethesda Hospital +[1]	Cincinnati	Church	218	8,407	21	R	12	8	(224)	Req	62	75
Christ Hospital +	Cincinnati	Church	370	11,127	15	R	12	16	(224)	Req	43	30
Cincinnati General Hospital +[1-3] X56	Cincinnati	City	850	14,933	100	R-S	12	42	(225)	Req	57	..
Deaconess Hospital +	Cincinnati	Church	168	4,827	15	R	12	5	(226)	Req	21	100
Good Samaritan Hospital +[1]	Cincinnati	Church	538	16,431	5	R	12	18	No	Req	49	60
Jewish Hospital +[1]	Cincinnati	NPAssn	264	9,432	7	R	12	10	(227)	Req	54	50
St. Mary's Hospital +[1]	Cincinnati	Church	200	8,517	35	R	12-24	6	(228)	Req	44	75
City Hospital +[1-3] X57	Cleveland	City	1,075	12,853	100	R-S	12	24	No	Req	86	40
Evangelical Deaconess Hospital [1]	Cleveland	NPAssn	133	6,854	...	R	12	3	No	Req	20	75
Fairview Park Hospital +[1]	Cleveland	Church	150	7,351	3	R	12	6	No	Req	40	75
Glenville Hospital [1]	Cleveland	NPAssn	120	4,502	5	M	12	4	No	None	42	75
Mount Sinai Hospital +[1-3] x57	Cleveland	NPAssn	219	9,044	10	R	12-24	8	No	None	45	50
St. Alexis Hospital +[1]	Cleveland	Church	235	10,059	14	R-S	12	8	No	Req	34	50
St. John's Hospital +[1]	Cleveland	Church	234	8,830	12	R	12	9	No	None	35	..
St. Luke's Hospital +[1-3]	Cleveland	Church	337	14,044	14	R	12	20	No	Req	44	30
St. Vincent Charity Hospital + x57	Cleveland	Church	297	8,781	16	R	12	12	(229)	Req	42	50
University Hospitals +[1-3] X57	Cleveland	NPAssn	700	22,725	36	S	24	46	No	Req	65	Varies
Grant Hospital +[1]	Columbus	NPAssn	290	9,998	5	R	12	8	No	None	43	50
Mount Carmel Hospital +[1]	Columbus	Church	265	10,241	5	R	12	8	(230)	None	28	50
Ohio State University Hospital +[1] X58	Columbus	State	279	8,876	53	R-S	24	22	(231)	None	81	9
St. Francis Hospital +[1] X58	Columbus	State	161	4,158	64	R	12	7	No	None	55	..
White Cross Hospital +[1]	Columbus	Church	200	10,418	12	R	12	12	No	None	41	50
Good Samaritan Hospital [1]	Dayton	Church	310	12,791	6	R-S	12	6	No	Req	14	..
Miami Valley Hospital +[1-3]	Dayton	NPAssn	425	13,732	10	R	12	10	No	Req	44	50
St. Elizabeth Hospital [1]	Dayton	Church	535	15,245	12	R	12	6	No	Req	53	125
Huron Road Hospital +[1]	East Cleveland	NPAssn	277	10,717	...	R	12	11	No	Req	51	50
Mercy Hospital +[1]	Hamilton	Church	300	8,639	15	R	12	..	No	None	34	100
Lakewood Hospital +	Lakewood	City	139	5,820	...	R	12	4	No	Req	55	75
Lima Memorial Hospital	Lima	NPAssn	165	6,330	5	R	12	6	No	None	24	90
St. Rita's Hospital [1]	Lima	Church	300	10,458	10	R	12	8	No	Req	23	100
Springfield City Hospital [1]	Springfield	City	270	10,115	5	R	12	8	No	Req	43	100
Flower Hospital [1]	Toledo	Church	135	5,256	...	R	12	6	No	None	29	150
Maumee Valley Hospital +[1]	Toledo	County	292	4,286	90	R	12	10	No	Req	58	75
Mercy Hospital +	Toledo	Church	295	11,750	30	R	12	8	No	Req	47	100
St. Vincent's Hospital +[1]	Toledo	Church	310	10,656	...	R	12	2	No	Req	35	75
Toledo Hospital +[1]	Toledo	NPAssn	266	9,574	4	R	12	10	No	Req	53	75
St. Elizabeth Hospital +[1]	Youngstown	Church	320	11,885	...	R	12	10	No	Req	26	100
Youngstown Hospital +[1]	Youngstown	NPAssn	627	19,327	...	R	12-24	20	No	Req	40	25
OKLAHOMA												
St. Anthony Hospital + x59	Oklahoma City	Church	375	12,960	12	R	12	10	No	Req	31	50
University Hospitals +[1-3] X59	Oklahoma City	State	361	6,474	83	R	12	15	No	Req	47	25
Wesley Hospital +[1] x59	Oklahoma City	Part	185	8,171	10	R	12	6	No	Req	45	50
Hillcrest Memorial Hospital +[1]	Tulsa	NPAssn	238	10,786	...	R	12	5	No	None	34	50
St. John's Hospital +[1]	Tulsa	Church	429	14,987	...	R	12	12	No	None	39	100
OREGON												
Emanuel Hospital +[1] x60	Portland	Church	330	13,183	...	R	12	14	(232)	Req	50	50
Good Samaritan Hospital +[1] x60	Portland	Church	430	13,527	5	R	12	16	No	None	51	50
Portland Sanitarium and Hospital +[1]	Portland	Church	144	8,072	...	R	12	5	No	None	45	104(a)
Providence Hospital + x60	Portland	Church	240	7,890	5	R	12	6	(233)	None	50	50
St. Vincent's Hospital + x60	Portland	Church	356	10,845	6	R	12	12	(234)	Req	39	50
University of Oregon Medical School Hospitals and Clinics +[1-3] X60	Portland	State	418	6,879	94	R	12	16	No	Op	71	50
PENNSYLVANIA												
Abington Memorial Hospital +	Abington	NPAssn	303	8,025	...	R	24	10	No	Req	57	..
Allentown Hospital +	Allentown	NPAssn	304	13,638	60	R	12	10	No	Req	36	75
Sacred Heart Hospital +[1]	Allentown	Church	301	7,6 5	90	R	12	5	No	Req	37	75
Altoona Hospital [1]	Altoona	NPAssn	193	6,576	95	R	12	6	No	Req	19	100
St. Luke's Hospital [1]	Bethlehem	NPAssn	323	14,210	15	R	12	10	No	Req	36	30
Bryn Mawr Hospital +	Bryn Mawr	NPAssn	285	7,564	20	R	12	10	No	Req	56	..
Chester Hospital	Chester	NPAssn	235	7,608	19	R	12	8	No	Req	39	75
George F. Geisinger Memorial Hospital +[1-3]	Danville	NPAssn	205	8,358	100	R	12	10	No	Req	83	20
Fitzgerald-Mercy Hospital + x64	Darby	Church	202	6,780	17	R	12	8	No	Req	50	50
Easton Hospital [1]	Easton	NPAssn	186	6,076	20	R	12	6	No	Req	32	100
Hamot Hospital +[1]	Erie	NPAssn	289	9,491	20	R	12	8	No	Req	54	100
St. Vincent's Hospital +	Erie	NPAssn	299	12,825	10	R	12	8	No	Req	24	75
Westmoreland Hospital +[1]	Greensburg	NPAssn	190	7,170	11	R	12	5	No	None	25	100
Harrisburg Hospital + X61	Harrisburg	NPAssn	312	9,838	16	R	12	12	No	Req	41	100
Harrisburg Polyclinic Hospital +[1]	Harrisburg	NPAssn	265	6,736	16	R	12	8	No	Req	38	100
Nesbitt Memorial Hospital [1]	Kingston	NPAssn	200	6,473	18	R	12	3	No	Req	30	100
Lancaster General Hospital [1]	Lancaster	NPAssn	248	8,764	15	R	12	9	No	Req	56	75
St. Joseph's Hospital +	Lancaster	Church	232	6,634	...	R	12	6	No	Req	63	100
McKeesport Hospital +[1]	McKeesport	NPAssn	275	9,952	14	R	12	7	No	Req	23	150
Montgomery Hospital	Norristown	NPAssn	193	7,300	30	R	12	8	No	Req	32	100
Doctors Hospital +[1]	Philadelphia	NPAssn	171	4,121	50	R	12	4	No	Req	36	25
Episcopal Hospital +[1-3] x62, x64	Philadelphia	Church	488	12,347	...	R	12	16	No	Req	28	..
Frankford Hospital +[1]	Philadelphia	NPAssn	144	4,484	90	R	12	7	No	Req	60	75
Germantown Dispensary and Hospital +[1] x62, X65	Philadelphia	NPAssn	349	7,966	65	R	12	13	No	Req	46	..
Graduate Hospital of the University of Pennsylvania +[1]	Philadelphia	NPAssn	461	7,580	100	R	12	11	(235)	Req	58	..
Hahnemann Hospital +[1] X61	Philadelphia	NPAssn	635	14,184	49	R	12	24	No	Req	62	..
Hospital of the University of Pennsylvania +[1-3] X64	Philadelphia	NPAssn	694	18,395	61	R	12	26	No	None	81	..
Hospital of the Woman's Medical College +[1] X65	Philadelphia	NPAssn	167	4,835	39	R	12	6	No	Req	67	..
Jefferson Medical College Hospital +[1] X62	Philadelphia	NPAssn	679	17,377	57	R	24	27	No	Req	49	..
Jewish Hospital +[1-3] x61, X63	Philadelphia	NPAssn	407	9,224	31	R	24	18	(236)	Req	57	..
Lankenau Hospital +[1]	Philadelphia	NPAssn	257	6,052	50	R	12	10	...	None	50	..

Abbreviations and other references will be found on pages 171 and 172.

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Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
PENNSYLVANIA—Continued												
Memorial Hospital [1]	Philadelphia	NPAssn	113	3,356	90	R	12	3	No	Req	24	125
Methodist Episcopal Hospital [1] x62, x65	Philadelphia	Church	210	4,222	...	R	12	7	No	Req	39	24
Misericordia Hospital [1] x62	Philadelphia	Church	200	6,966	...	R	12	7	No	Req	42	..
Mount Sinai Hospital ✦[1-3] X61, x62	Philadelphia	NPAssn	250	6,231	46	R	12	12	No	Req	75	..
Nazareth Hospital ✦[1]	Philadelphia	Church	150	6,106	35	R	12	6	No	None	26	75
Pennsylvania Hospital ✦[2] X62, X64	Philadelphia	NPAssn	453	10,4.9	100	R	24	18	(227)	Req	62	..
Philadelphia General Hospital ✦[1-3] X61-62-63-64-65	Philadelphia	City	2,540	25,456	100	R	24	96	(236)	Req	57	..
Presbyterian Hospital ✦[3] x64	Philadelphia	Church	334	7,174	38	R	24	12	No	Req	71	..
St. Joseph's Hospital x62	Philadelphia	Church	200	5,582	...	R	12	8	No	Req	33	100
St. Luke's and Children's Medical Center ✦[1] x61-62	Philadelphia	NPAssn	281	7,292	40	R	12	9	No	Req	25	75
St. Mary's Hospital	Philadelphia	Church	230	6,195	100	R	12	6	No	Req	31	100
Temple University Hospital ✦[1] X63	Philadelphia	NPAssn	558	14,563	...	R	12	21	(236)	None	60	..
Woman's Hospital ✦[2] X65	Philadelphia	NPAssn	137	4,333	42	R	12	6	No	Req	52	..
Women's Homeopathic Hospital ✦[1]	Philadelphia	NPAssn	183	5,314	52	R	12	3	No	Req	30	175
Allegheny General Hospital ✦ x66	Pittsburgh	NPAssn	554	11,946	47	R	12	16	No	Req	25	..
Mercy Hospital ✦[1] X66	Pittsburgh	Church	667	14,945	35	R	12	24	(238)	Req	40	..
Montefiore Hospital ✦[1]	Pittsburgh	NPAssn	242	8,986	20	R	12	11	No	Req	44	25
Pittsburgh Hospital ✦[1]	Pittsburgh	NPAssn	186	6,160	90	R	12	6	No	Req	28	50
Presbyterian Hospital ✦[1] X66	Pittsburgh	NPAssn	225	5,027	...	R	12	10	(239)	Req	46	..
St. Francis Hospital ✦[1] X66	Pittsburgh	NPAssn	690	14,674	...	R	12	20	(240)	Req	19	..
St. John's General Hospital [1]	Pittsburgh	NPAssn	197	6,990	8	R	12	6	No	None	19	100
St. Joseph's Hospital and Dispensary	Pittsburgh	Church	170	6,107	95	R	12	6	No	Req	36	75
St. Margaret Memorial Hospital ✦[1]	Pittsburgh	Church	129	3,082	...	R	12	4	No	Req	36	75
Shadyside Hospital [1]	Pittsburgh	NPAssn	301	8,419	14	R	12	10	No	Req	18	75
South Side Hospital [1]	Pittsburgh	NPAssn	207	6,905	95	R	12	7	No	Req	18	75
Western Pennsylvania Hospital ✦[1-3]	Pittsburgh	NPAssn	552	13,533	85	R	12	16	No	Req	25	..
Pottsville Hospital [1]	Pottsville	NPAssn	155	3,781	...	R	12	3	No	None	..	..
Community General Hospital [1]	Reading	NPAssn	113	3,539	22	R	12	4	No	Req	56	150
Reading Hospital ✦[1-3]	Reading	NPAssn	348	9,214	14	R	12	10	No	Req	56	50
St. Joseph's Hospital ✦[1]	Reading	Church	191	6,085	16	R	12	6	No	Req	45	..
Robert Packer Hospital ✦	Sayre	NPAssn	304	10,558	100	R	12	10	No	Req	64	..
Moses Taylor Hospital [1]	Scranton	NPAssn	120	2,460	54	R	12	3	(241)	Req	33	100
Scranton State Hospital [1]	Scranton	State	290	5,876	53	R	12	9	No	Req	27	128.50
Sewickley Valley Hospital [1]	Sewickley	NPAssn	153	5,533	5	R	12	7	No	Req	19	200
Uniontown Hospital ✦[1]	Uniontown	NPAssn	215	7,258	28	R	12	6	No	Req	65	100
Washington Hospital ✦[1]	Washington	NPAssn	188	5,433	13	R	12	6	No	Req	26	150
Chester County Hospital ✦[3]	West Chester	NPAssn	153	4,279	...	R	12	4	No	Req	21	100
Mercy Hospital ✦[1]	Wilkes-Barre	Church	201	5,514	33	R	12	6	No	Req	41	50
Wilkes-Barre General Hospital ✦[1]	Wilkes-Barre	NPAssn	370	9,581	35	R	12	10	No	Req	31	50
Columbia Hospital ✦[1]	Wilkinsburg	Church	171	5,785	100	R	12	5	No	Req	25	50
Williamsport Hospital ✦[1]	Williamsport	NPAssn	260	8,773	22	R	12	8	No	Req	34	100
York Hospital ✦	York	NPAssn	166	7,544	...	R	12	8	No	Req	38	100
RHODE ISLAND												
Memorial Hospital	Pawtucket	NPAssn	172	6,992	40	R	12	6	No	Req	51	50
Rhode Island Hospital ✦[1-3]	Providence	NPAssn	569	14,398	42	R	24	12	No	Req	56	..
Roger Williams General Hospital ✦[1]	Providence	NPAssn	162	5,811	10	R	12	6	No	Req	25	100
St. Joseph's Hospital	Providence	Church	310	8,076	17	R	24	4	(175)	Req	26	100
SOUTH CAROLINA												
Roper Hospital ✦[1] X67	Charleston	NPAssn	450	12,089	45	R	12	21	No	Req	41	..
Columbia Hospital ✦[1]	Columbia	County	437	11,492	30	R	12	12	No	Req	30	50
McLeod Infirmary [1]	Florence	NPAssn	195	7,743	...	R	12	6	No	Req	7	100
Greenville General Hospital ✦[1]	Greenville	City	327	11,672	22	R	12	12	No	Req	26	75
Spartanburg General Hospital [1]	Spartanburg	County	296	11,287	...	R	12	8	No	Req	22	50
SOUTH DAKOTA												
McKennan Hospital [1]	Sioux Falls	Church	164	6,995	...	R	12	4	No	None	51	75
Sioux Valley Hospital [1]	Sioux Falls	NPAssn	190	8,272	...	R	12	8	No	None	40	60
Sacred Heart Hospital [1]	Yankton	Church	170	5,118	...	R	12	9	No	None	31	50
TENNESSEE												
Baroness Erlanger Hospital ✦[1-3]	Chattanooga	CyCo	450	15,565	...	R	12	8	(176)	Req	23	60
Fort Sanders Hospital [1]	Knoxville	NPAssn	200	8,277	...	R	12	8	No	None	27	90
Knoxville General Hospital ✦[3]	Knoxville	City	285	8,153	49	R	12	10	No	Req	20	60
Baptist Memorial Hospital ✦	Memphis	Church	500	18,934	23	R-S	12	16	No	Req	23	50
John Gaston Hospital ✦[1-3] X68	Memphis	City	489	10,6.9	95	R-S	12	24	No	Req	65	35
Methodist Hospital ✦[1]	Memphis	Church	267	15,465	7	R	12	12	No	Req	38	50
St. Joseph Hospital ✦[1]	Memphis	Church	280	10,818	...	R	12	1	No	Req	41	50
George W. Hubbard Hospital ✦[1-3] X69	Nashville	NPAssn	163	3,077	90	R	12	7	No	Req	56	35
Mid-State Baptist Hospital	Nashville	Church	119	4,806	...	M	12	5	No	None	21	75
Nashville General Hospital ✦ x70	Nashville	City	260	6,525	...	R-S	12-15	14	No	Req	33	30
St. Thomas Hospital ✦	Nashville	Church	231	11,161	28	S	12	10	(177)	None	39	30
Vanderbilt University Hospital ✦[1] X70	Nashville	NPAssn	340	9,234	55	S	12	36	(178)	Req	68	..
Oak Ridge Hospital [1]	Oak Ridge	NPAssn	292	7,976	2	R	12	6	No	Req	60	136
TEXAS												
Brackenridge Hospital [1]	Austin	City	237	6,903	48	R	12	6	No	Req	32	60
Baylor University Hospital ✦[1] x71	Dallas	Church	392	16,594	10	R-S	12	28	No	None	36	..
Methodist Hospital ✦[3] x71	Dallas	Church	208	10,757	10	R	12	6	No	Req	26	50
Parkland Hospital ✦[1-3] X71	Dallas	CyCo	416	9,932	80	M-S	12	5	No	Req	69	10
St. Paul's Hospital ✦	Dallas	Church	310	12,870	...	R-S	12	14	No	Req	29	50
El Paso City-County Hospital	El Paso	CyCo	192	7,5.9	100	R	12	6	No	Req	55	100
City-County Hospital	Fort Worth	CyCo	168	4,106	100	R	12	8	No	Req	35	50
Harris Hospital ✦[1]	Fort Worth	Church	297	12,884	7	R	12	16	No	Req	38	50
St. Joseph's Hospital [1]	Fort Worth	Church	243	10,407	3	R	12	2	No	Req	23	100
University of Texas Medical Branch Hospitals ✦[1] X72	Galveston	State	701	11,132	74	R	12	24	No	Req	67	25
Hermann Hospital ✦[1] X73	Houston	NPAssn	300	9,054	50	R	12	10	No	Req	53	20
Jefferson Davis Hospital ✦[1-3] x72 X73	Houston	CyCo	441	12,407	...	..	12	24	No	Req	19	25
Methodist Hospital ✦[1] x72-73	Houston	Church	135	5,080	13	R	12	4	No	Req	48	50
St. Joseph's Infirmary x72-73	Houston	Church	377	20,790	10	R	..	12	No	None	30	75
Baptist Memorial Hospital [1]	San Antonio	NPAssn	259	12,393	5	R	12	10	No	Req	27	75
Nix Memorial Hospital [1]	San Antonio	Corp	157	7,102	...	R	12	3	No	None	19	125
Santa Rosa Hospital ✦	San Antonio	Church	365	13,004	...	R	12	12	No	Req	34	75
Kings Daughters Hospital [1]	Temple	NPAssn	110	3,223	...	R	12	4	No	Req	20	125
Scott and White Hospital ✦[1]	Temple	Corp	226	6,914	100	R	12	13	(180)	Req	46	75
Wichita Falls Clinic Hospital ✦	Wichita Falls	Part	102	4,718	...	R	12	3	No	Req	41	150

Abbreviations and other references will be found on pages 171 and 172.

Name of Hospital	Location	Control	Bed Capacity	Total Patients Admitted	% Service Cases	Type of Internship	Length of Service in Months	Internships Offered	Affiliated Service	Outpatient Service	Autopsy Percentage	Stipend per Month
UTAH												
St. Benedict's Hospital [1] x74	Ogden	Church	156	5,747	...	R	12	6	No	None	54	75
Thomas D. Dee Memorial Hospital [+1] x74	Ogden	Church	300	10,590	...	R	12	6	(181)	Req	46	50
Dr. W. H. Groves Latter-Day Saints Hospital [+1] x74	Salt Lake City	Church	357	14,481	5	R	12	12	No	Req	40	25
Holy Cross Hospital [+1] x74	Salt Lake City	Church	190	7,597	...	R	12	5	No	None	36	25
St. Mark's Hospital [+1] x74	Salt Lake City	Church	214	7,212	...	R-S	12	6	No	Req	24	50
Salt Lake County General Hospital [+1] X74	Salt Lake City	County	231	3,672	100	R-M-S	12	15	No	Req	70	25
VERMONT												
Bishop DeGoesbriand Hospital [+1] X75	Burlington	Church	115	3,542	35	R	12	5	No	None	36	50
Mary Fletcher Hospital [+1] X75	Burlington	NPAssn	193	7,246	33	R	12	8	No	Req	59	50
VIRGINIA												
Alexandria Hospital [+1]	Alexandria	NPAssn	169	6,141	...	R	12	6	No	Req	54	75
Arlington Hospital + x18	Arlington	NPAssn	115	4,638	...	R	12	4	No	None	59	..
University of Virginia Hospital [+1] X76	Charlottesville	State	309	14,271	100	R-M-S	12	25	(182)	Req	45	..
Elizabeth Buxton Hospital [1]	Newport News	Indiv	146	5,663	5	R	12	4	No	Req	42	150
Riverside Hospital [1]	Newport News	NPAssn	190	5,484	...	R	12	4	No	Req	30	50
De Paul Hospital [+1]	Norfolk	Church	258	8,872	8	R	12	6	(183)	None	49	50
Norfolk General Hospital [+1]	Norfolk	NPAssn	340	9,706	15	R	12	13	No	Req	34	50
Johnston-Willis Hospital [+1]	Richmond	Corp	200	6,320	...	R	12	6	No	Req	59	25
Medical College of Virginia, Hospital Division [+1-3] X77 (Memorial, Dooley and St. Philip Hospitals)	Richmond	State	861	16,859	55	R-M	12	35	(185)	Req	43	..
Stuart Circle Hospital [1]	Richmond	Corp	114	4,392	...	R	12	4	No	None	48	50
Jefferson Hospital +	Roanoke	NPAssn	150	5,390	75	R	12	3	(186)	Req	38	50
Lewis-Gale Hospital +	Roanoke	NPAssn	180	6,402	100	R	12	4	No	Req	31	75
Roanoke Hospital [1]	Roanoke	NPAssn	160	4,871	...	R	12-24	6	No	Req	45	75
WASHINGTON												
Columbus Hospital [1]	Seattle	Church	185	5,375	...	R	12	5	(187)	None	33	50
Doctors Hospital +	Seattle	NPAssn	200	7,963	...	R	12	6	No	None	58	50
King County Hospital, Unit No. 1 (Harborview) [+3]	Seattle	County	500	12,153	...	R	12	22	No	Req	50	60
Providence Hospital [+1]	Seattle	Church	357	11,918	100	R	12	11	(188)	Req	54	50
Seattle General Hospital [1]	Seattle	NPAssn	128	4,752	...	R	12	4	(189)	Req	27	75
Swedish Hospital +	Seattle	NPAssn	330	11,868	...	R	12-18	12	(189)	Req	61	50
Virginia Mason Hospital +	Seattle	NPAssn	248	9,330	...	R	12	8	No	None	74	50
Deaconess Hospital [+1]	Spokane	Church	200	8,874	...	R	12	8	No	None	47	85
Sacred Heart Hospital +	Spokane	Church	400	16,005	...	R	12	12	No	None	15	100
St. Luke's Hospital [+1]	Spokane	NPAssn	295	7,294	...	R	12	5	(190)	Req	47	75
Pierce County Hospital [1-3]	Tacoma	City	215	4,248	...	R	12	8	(192)	Req	45	100
St. Joseph's Hospital [+1]	Tacoma	Church	279	8,779	...	R	12	5	No	Req	49	100
Tacoma General Hospital [+1]	Tacoma	NPAssn	213	8,375	...	R	12	6	No	None	38	75
Northern Permanente Hospital [+1]	Vancouver	NPAssn	300	3,327	...	R	12	4	No	Req	88	100
WEST VIRGINIA												
Bluefield Sanitarium	Bluefield	Corp	165	7,428	10	R	12	4	No	None	25	75
Charleston General Hospital [+1]	Charleston	NPAssn	250	8,782	50	R	12	7	No	Req	35	100
Kanawha Valley Hospital [1]	Charleston	Corp	150	5,359	80	M	12	2	No	Req	26	100
Chesapeake and Ohio Hospital +	Huntington	NPAssn	165	4,633	...	R	12	4	No	Req	32	50
St. Mary's Hospital +	Huntington	Church	300	14,479	10	R	12	8	No	Req	36	75
St. Joseph's Hospital +	Parkersburg	Church	170	5,748	...	R	12	3	No	None	33	100
Ohio Valley General Hospital	Wheeling	NPAssn	320	9,055	4	R	12	10	No	Req	30	100
Wheeling Hospital [1]	Wheeling	Church	250	7,794	8	R	12	5	No	None	9	100
WISCONSIN												
St. Elizabeth Hospital	Appleton	Church	205	6,763	...	R	12	3	No	None	21	50
Luther Hospital [+] x78	Eau Claire	NPAssn	193	6,396	...	R	12	4	No	Req	57	50
St. Agnes Hospital	Fond du Lac	Church	284	10,313	...	R	12	4	No	None	34	50
Mercy Hospital [+] x78	Janesville	Church	200	4,092	...	R-M-S	12	4	No	None	31	40
La Crosse Lutheran Hospital [+1] x78	La Crosse	Church	140	4,677	...	R	12	3	No	None	49	50
St. Francis Hospital [+] x78	La Crosse	Church	282	8,251	...	R	12	10	No	None	27	100
Madison General Hospital [+1]	Madison	NPAssn	177	7,099	...	R	12	6	No	Req	47	75
Methodist Hospital [1]	Madison	Church	120	4,553	...	R	12	4	No	Req	60	75
St. Mary's Hospital [+]	Madison	Church	250	7,600	...	R	12	8	No	None	41	50
State of Wisconsin General Hospital [+] X78	Madison	State	750	14,349	100	R	12	20	No	Req	64	..
St. Joseph's Hospital [+] x78	Marshfield	Church	195	6,858	...	R	12	6	No	None	43	100
Columbia Hospital + x79	Milwaukee	NPAssn	160	5,294	...	R	12	7	No	Req	56	25
Evangelical Deaconess Hospital +	Milwaukee	Church	135	6,547	...	R	12	6	No	Req	46	100
Milwaukee County Hospital [+1] X79	Milwaukee	County	950	18,486	100	R	12	40	(191)	Req	38	10
Milwaukee Hospital [+] x79	Milwaukee	Church	285	11,650	...	R	12	9	No	Req	59	30
Misericordia Hospital	Milwaukee	Church	110	4,236	100	R	12	3	No	None	33	100
Mount Sinai Hospital [+] x79	Milwaukee	NPAssn	175	8,080	...	R	12	6	No	Req	44	40
St. Joseph Hospital [+] x79	Milwaukee	Church	370	13,051	...	R-S	12	12	(193)	Req	31	40
St. Luke's Hospital [+]	Milwaukee	Church	135	6,632	...	R	12	6	No	None	29	130
St. Mary's Hospital +	Milwaukee	Church	210	9,321	...	R	12	6	No	Req	60	50
St. Michael's Hospital	Milwaukee	Church	135	4,755	13	M	12	4	No	Req	29	250
Mercy Hospital [1]	Oshkosh	Church	220	7,242	...	R	12	5	No	None	26	100
St. Mary's Hospital [1]	Racine	Church	250	7,033	...	R	12	4	No	None	38	75
CANAL ZONE												
Gorgas Hospital +	Ancon	Federal	834	11,773	100	R	12	16	No	None	68	166.66
HAWAII												
Kuakini Hospital [+1]	Honolulu	NPAssn	120	5,198	...	R	12	2	No	None	64	75
Queen's Hospital [+1]	Honolulu	NPAssn	402	12,360	10	R	12	12	(173)	Req	60	50
St. Francis Hospital [1]	Honolulu	Church	213	7,749	7	R	12	8	No	Req	41	75
PUERTO RICO												
Arecibo District Hospital [1]	Arecibo	Govt	286	4,396	100	R	12	4	No	None	24	75
Bayamon District Hospital [1]	Bayamon	Govt	300	6,871	100	R	12	8	No	Req	22	75
Fajardo District Hospital [1]	Fajardo	Govt	300	4,631	...	R	15	4	No	Req	16	..
Clinica Quirurgica Dr. Pila [1]	Ponce	NPAssn	217	3,709	95	R	12	4	No	Req	30	100
Presbyterian Hospital [1]	San Juan	Church	100	2,567	43	R	12	3	(174)	Req	17	25
San Juan City Hospital [1]	San Juan	City	366	10,912	100	R	12	12	(174)	Req	32	75

Abbreviations and other references will be found on pages 171 and 172.

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HOSPITALS APPROVED FOR INTERNSHIPS IN THE DOMINION OF CANADA

For the benefit of graduates of approved medical colleges who desire an internship in Canada, the Council on Medical Education and Hospitals of the American Medical Association has declared that hospitals which conform to the standards of the Canadian Medical Association should be regarded as giving an internship equivalent in educational value to that offered by hospitals in the United States approved for intern training by the Council. It is understood, however, that this statement applies only to hospitals that are unqualifiedly "Approved" under the Canadian plan and does not apply to that group referred to as "Commended."

The following list of hospitals, revised to Jan. 1, 1949, has been furnished by the Canadian Medical Association.

Name of Hospital	Location
Camp Hill Hospital	Halifax, N. S.
Victoria General Hospital	Halifax, N. S.
St. John General Hospital	St. John, N. B.
Hospital du St. Sacrament	Quebec, Que.
Hospital Dieu de Quebec	Quebec, Que.
Hospital of the Infant Jesus	Quebec, Que.
Jeffrey Hale's Hospital	Quebec, Que.
Veterans Hospital	Quebec, Que.
Children's Memorial Hospital	Montreal, Que.
Herbert Reddy Mem. Hospital	Montreal, Que.
Homeopathic Hospital	Montreal, Que.
Hospital Notre Dame	Montreal, Que.
Hospital Ste. Jeanne d'Arc	Montreal, Que.
Hospital Ste. Justine	Montreal, Que.
Hotel Dieu de Montreal	Montreal, Que.
Hospital Ste. Luc	Montreal, Que.
Jewish General Hospital	Montreal, Que.
Montreal General Hospital	Montreal, Que.
Queen Mary Veterans Hospital	Montreal, Que.
Royal Victoria Hospital	Montreal, Que.
St. Mary's Hospital	Montreal, Que.
Ste. Anne's Hospital..Ste. Anne de Bellevue, Que.	
Brantford General Hospital	Brantford, Ont.
Hamilton General Hospital	Hamilton, Ont.
St. Joseph's Hospital	Hamilton, Ont.
St. Joseph's Hospital	London, Ont.
Victoria Hospital	London, Ont.
Westminster Hospital	London, Ont.
Oshawa General Hospital	Oshawa, Ont.
Ottawa Civic Hospital	Ottawa, Ont.
Ottawa General Hospital	Ottawa, Ont.
Hotel Dieu Hospital	Kingston, Ont.
Kingston General Hospital	Kingston, Ont.
Christie Street Hospital	Toronto, Ont.
Hospital for Sick Children	Toronto, Ont.
Mount Sinai Hospital	Toronto, Ont.
St. Joseph's Hospital	Toronto, Ont.
St. Michael's Hospital	Toronto, Ont.
Toronto East General Hospital	Toronto, Ont.
Toronto General Hospital	Toronto, Ont.
Toronto Western Hospital	Toronto, Ont.
Wellesley Hospital	Toronto, Ont.
Women's College Hospital	Toronto, Ont.
Grace Hospital	Windsor, Ont.
Metropolitan Hospital	Windsor, Ont.
Hotel Dieu of St. Joseph	Windsor, Ont.
Children's Hospital	Winnipeg, Man.
Deer Lodge Hospital	Winnipeg, Man.
Misericordia Hospital	Winnipeg, Man.
Winnipeg General Hospital	Winnipeg, Man.
St. Boniface Hospital	St. Boniface, Man.
Regina Grey Nun's Hospital	Regina, Sask.
Regina General Hospital	Regina, Sask.
St. Paul's Hospital	Saskatoon, Sask.
Saskatoon City Hospital	Saskatoon, Sask.
Calgary General Hospital	Calgary, Alta.
Colonel Belcher Hospital	Calgary, Alta.
Holy Cross Hospital	Calgary, Alta.
Edmonton General Hospital	Edmonton, Alta.
Misericordia Hospital	Edmonton, Alta.
Royal Alexandra Hospital	Edmonton, Alta.
University of Alberta Hosp	Edmonton, Alta.
St. Paul's Hospital	Vancouver, B. C.
Shaughnessy Hospital	Vancouver, B. C.
Vancouver General Hospital	Vancouver, B. C.
Royal Jubilee Hospital	Victoria, B. C.
St. Joseph's Hospital	Victoria, B. C.
Veterans Hospital	Victoria, B. C.

ABBREVIATIONS AND NOTES

1. Women interns admitted
2. Women interns only
3. Dental interns employed
4. Male patients only

CyCo	City and County
Corp	Corporation unrestricted as to profit
NPAssn	Nonprofit association
Part	Partnership

Op	Optional
Req	Required
R	Rotation
M	Mixed
S	Straight

+ The plus sign indicates additional approval for residencies in specialties, as shown in the Council's list of Approved Residencies and Fellowships for Veteran and Civilian Physicians.

Medical School Affiliations

Footnotes 10 to 80 refer to medical schools affiliated with hospitals for undergraduate clinical clerkships.

Hospitals have been identified with symbol **X** when a medical school has indicated that the hospital is a major unit in the school's teaching program. Hospitals have been identified with symbol **x** when a medical school has indicated that the hospital is used to a limited extent in the school's teaching program.

10. Medical College of Alabama, Birmingham, Ala.
11. University of Arkansas School of Medicine, Little Rock, Ark.
12. University of California Medical School, Berkeley-San Francisco, Calif.
13. College of Medical Evangelists, Loma Linda-Los Angeles, Calif.
14. University of Southern California School of Medicine, Los Angeles, Calif.
15. Stanford University School of Medicine, Stanford University—San Francisco, Calif.
16. University of Colorado School of Medicine, Denver, Colo.
17. Yale University School of Medicine, New Haven, Conn.
18. Georgetown University School of Medicine, Washington, D. C.
19. George Washington University School of Medicine, Washington, D. C.
20. Howard University College of Medicine, Washington, D. C.
21. Emory University School of Medicine, Atlanta, Ga.
22. University of Georgia School of Medicine, Augusta, Ga.
23. Chicago Medical School, Chicago, Ill.
    Loyola University School of Medicine, Chicago, Ill.—See footnote 80.
24. Northwestern University Medical School, Chicago, Ill.
25. University of Chicago School of Medicine, Chicago, Ill.
26. University of Illinois College of Medicine, Chicago, Ill.
27. Indiana University School of Medicine, Bloomington-Indianapolis, Ind.
28. State University of Iowa College of Medicine, Iowa City, Iowa.
29. University of Kansas School of Medicine, Lawrence-Kansas City, Kan.
30. University of Louisville School of Medicine, Louisville, Ky.
31. Louisiana State University School of Medicine, New Orleans, La.
32. Tulane University of Louisiana School of Medicine, New Orleans, La.
33. Johns Hopkins University School of Medicine, Baltimore, Md.
34. University of Maryland School of Medicine and College of Phys. and Surg., Baltimore, Md.
35. Boston University School of Medicine, Boston, Mass.
36. Harvard Medical School, Boston, Mass.
37. Tufts College Medical School, Boston, Mass.
38. University of Michigan Medical School, Ann Arbor, Mich.
39. Wayne University College of Medicine, Detroit, Mich.
40. University of Minnesota Medical School, Minneapolis, Minn.
41. St. Louis University School of Medicine, St. Louis, Mo.
42. Washington University School of Medicine, St. Louis, Mo.
43. Creighton University School of Medicine, Omaha, Neb.
44. University of Nebraska College of Medicine, Omaha, Neb.
45. Albany Medical College, Albany, N. Y.
46. Long Island College of Medicine, Brooklyn, N. Y.
47. University of Buffalo School of Medicine, Buffalo, N. Y.
48. Columbia University College of Physicians and Surgeons, New York, N. Y.
49. Cornell University Medical College, New York, N. Y.
50. New York Medical College, Flower and Fifth Avenue Hospitals, New York, N. Y.
51. New York University College of Medicine, New York, N. Y.
52. University of Rochester School of Medicine and Dentistry, Rochester, N. Y.
53. Syracuse University College of Medicine, Syracuse, N. Y.
54. Duke University School of Medicine, Durham, N. C.
55. Bowman Gray School of Medicine of Wake Forest College, Winston-Salem, N. C.
56. University of Cincinnati College of Medicine, Cincinnati, Ohio.
57. Western Reserve University School of Medicine, Cleveland, Ohio.
58. Ohio State University College of Medicine, Columbus, Ohio.
59. University of Oklahoma School of Medicine, Oklahoma City, Okla.
60. University of Oregon Medical School, Portland, Ore.
61. Hahnemann Medical College and Hospital of Philadelphia, Philadelphia, Pa.
62. Jefferson Medical College of Philadelphia, Philadelphia, Pa.
63. Temple University School of Medicine, Philadelphia, Pa.
64. University of Pennsylvania School of Medicine, Philadelphia, Pa.
65. Woman's Medical College of Pennsylvania, Philadelphia, Pa.
66. University of Pittsburgh School of Medicine, Pittsburgh, Pa.
67. Medical College of the State of South Carolina, Charleston, S. C.
68. University of Tennessee College of Medicine, Memphis, Tenn.
69. Meharry Medical College, Nashville, Tenn.
70. Vanderbilt University School of Medicine, Nashville, Tenn.
71. Southwestern Medical College of the Southwestern Medical Foundation, Dallas, Tex.
72. University of Texas School of Medicine, Galveston, Tex.
73. Baylor University College of Medicine, Houston, Tex.
74. University of Utah School of Medicine, Salt Lake City, Utah.
75. University of Vermont College of Medicine, Burlington, Vt.
76. University of Virginia Department of Medicine, Charlottesville, Va.
77. Medical College of Virginia, Richmond, Va.
78. University of Wisconsin Medical School, Madison, Wis.
79. Marquette University School of Medicine, Milwaukee, Wis.
80. Stritch School of Medicine of Loyola University, Chicago, Ill.

Affiliations as Referred to in Column Headed: "Affiliated Service"

104. Convalescent Home for Crippled Children, Phoenix, orthopedics.
105. Pima County General Hospital, Tucson, tuberculosis.
106. University Hospital; St. Vincent Infirmary, Little Rock.
107. Arkansas Baptist Hospital; St. Vincent Infirmary, Little Rock.
108. Los Angeles County Hospital, Los Angeles.
109. Santa Monica Hospital, emergency, outpatient service.
110. Children's Hospital, Los Angeles, pediatrics.
111. Children's Hospital; Los Angeles Maternity Service, pediatrics, obstetrics.
112. Fairmont Hospital of Alameda County, San Leandro.
113. San Francisco Hospital, obstetrics, gynecology.
114. Langley Porter Clinic; Children's Hospital, San Francisco, psychiatry, pediatrics.
115. Santa Barbara General Hospital, Santa Barbara.
116. Santa Barbara Cottage Hospital, Santa Barbara, medicine, surgery.
117. Boulder-Colorado Sanitarium and Hospital.
118. Children's Hospital, Denver, pediatrics.
119. Undercliff Sanatorium, Meriden, Connecticut.
120. Connecticut State Hospital, Middleton, psychiatry; Undercliff Sanatorium, Meriden, tuberculosis; Veterans Administration Hospital, Newington, Connecticut.
121. Gallinger Municipal Hospital, Washington, D. C.
122. Grady Memorial Hospital, Atlanta, pediatrics, gynecology, surgery.
123. Grady Memorial Hospital, Atlanta, medicine.
124. Frank Cuneo Hospital, Chicago, obstetrics, gynecology.
125. Winfield Hospital, Winfield, tuberculosis.
126. Children's Memorial Hospital, Chicago, pediatrics; Lake County Tuberculosis Sanatorium, pediatrics, tuberculosis.
127. Evansville State Hospital; Boehne Tuberculosis Hospital, Evansville.
128. Indiana University Medical Center, Indianapolis.
129. Norfolk General Hospital, Norfolk, obstetrics; Kings Daughters Hospital, Portsmouth, pediatrics.
130. Isolation Hospital; Pine Knoll Sanatorium, Davenport, communicable diseases, tuberculosis.
131. Broadlawns Polk County Hospital, Des Moines.
132. Salvation Army Home and Hospital; Sedgwick County Hospital, Wichita, obstetrics.
133. St. Joseph's Hospital; Sedgwick County Hospital, Wichita.
134. Children's Free Hospital, Louisville, pediatrics; Waverly Hills Sanatorium, Waverly Hills, tuberculosis.
135. Shreveport Charity Hospital, pathology.
136. John Hopkins Hospital, Baltimore, male urology.
137. University Hospital, Baltimore.
138. Sydenham Hospital, Baltimore, pediatrics.
139. Charles V. Chapin Hospital, Providence, R. I., contagious diseases
140. Boston Lying-in Hospital; House of the Good Samaritan, Boston, obstetrics, pediatrics, rheumatic fever.
141. Framingham Union Hospital, surgery.
142. Robert Breck Brigham Hospital; New England Deaconess Hospital; Haynes Memorial Hospital, Boston, medicine.
143. Wesson Maternity Hospital, Springfield, obstetrics.
144. Health Department Hospital; Shriner's Hospital for Crippled Children, Springfield, tuberculosis, contagious diseases, orthopedics.
145. Herman Kiefer Hospital; Children's Hospital; City of Detroit Receiving Hospital, pediatrics, contagious diseases.
146. Herman Kiefer Hospital, Detroit, obstetrics, contagious diseases.
147. Herman Kiefer Hospital; Children's Hospital, Detroit, pediatrics, contagious diseases, obstetrics.
148. St. Joseph's Retreat, Dearborn, psychiatry.
149. Grace Hospital, Detroit, obstetrics.
150. Children's Hospital, City of Detroit Receiving Hospital.
151. Salvation Army Evangeline Booth Home and Hospital, Grand Rapids, obstetrics.
152. Jackson County Sanatorium, Jackson, tuberculosis, contagious diseases.
153. Ingham Sanatorium, Lansing.
154. Miller Memorial Hospital, Duluth, outpatient service.
155. University Hospitals, Minneapolis.
156. Minneapolis General Hospital, outpatient service.
157. Children's Hospital, St. Paul, pediatrics.
158. Gillette State Hospital for Crippled Children, St. Paul, orthopedics.
159. Children's Mercy Hospital, Kansas City, Missouri, pediatrics.
160. St. Louis City Hospital; St. Louis Children's Hospital, medicine and pediatrics.
161. Robert Koch Hospital, Koch, tuberculosis, contagious diseases.
162. Alexian Brothers Hospital, St. Louis, psychiatry.
163. St. Louis City Hospital, isolation.
164. St. Louis City Sanitarium, psychiatry.
165. St. Louis City Hospital, contagious diseases, tuberculosis; Shriner's Hospital for Crippled Children, orthopedics.
166. St. Bernard's Hospital, Council Bluffs, psychiatry.
167. Children's Seashore House for Invalid Children, Atlantic City, pediatrics, communicable diseases.
168. New Jersey Orthopedic Hospital, Orange; Essex County Hospital for Contagious Diseases, Belleville; Essex Mountain Sanatorium, Verona.
169. St. Elizabeth Hospital, Elizabeth, obstetrics.
170. Laguna Honda Home, San Francisco, chronic diseases; Hassler Health Home, Redwood City, tuberculosis.
171. California Hospital, Los Angeles, pediatrics.
172. University of Colorado Medical School, Denver, pediatrics, outpatient service.
173. Kaulkeolani Children's Hospital, Honolulu, pediatrics.
174. University Hospital, San Juan, Puerto Rico, pathology.
175. Charles V. Chapin Hospital, Providence, contagious diseases, psychiatry.
176. T. C. Thompson Children's Hospital; Pine Breeze Sanatorium, Chattanooga, pediatrics, tuberculosis.
177. Vanderbilt University Hospital, Nashville.
178. St. Thomas Hospital; Nashville General Hospital, Tennessee; Sydenham Hospital, Baltimore.
179. St. Mary's Infirmary, Galveston, gynecology, pediatrics.
180. Gulf, Colorado and Santa Fe Hospital, Temple, Texas, medicine, surgery.
181. Utah State Tuberculosis Sanatorium.
182. Blue Ridge Sanatorium, Charlottesville, Virginia, tuberculosis.
183. Grandy and Wise Hospital, Norfolk, tuberculosis.
184. Norfolk General Hospital, Norfolk, obstetrics; Kings Daughters Hospital, Portsmouth, pediatrics.
185. Interns are rotated through the following hospitals: Stuart Circle Hospital; St. Luke's Hospital; St. Elizabeth's Hospital; Ralford Memorial Hospital, Franklin; Mary Washington Hospital, Fredericksburg; Southside Community Hospital, Farmville; Northampton-Accomack Memorial Hospital, Massawadox, Virginia.
186. Southern Pacific Hospital, Houston, industrial medicine, surgery.
187. King County Hospital, Seattle, outpatient service.
188. Firland Sanatorium, Seattle, chest diseases.
189. Children's Orthopedic Hospital, Seattle.
190. Shriner's Hospital for Crippled Children, Spokane, orthopedics.
191. St. Joseph's Hospital, South View Hospital, Milwaukee, isolation.
192. Mountain View Sanatorium, Lakeview, tuberculosis.
193. St. Michael Hospital, Milwaukee, outpatient service.
194. Misericordia Hospital, New York City, obstetrics, gynecology, pediatrics.
195. Mount Sinai Hospital, Cleveland, obstetrics, gynecology, pediatrics.
196. Chicago Maternity Center; Chicago Memorial Hospital, obstetrics, gynecology, pediatrics.
197. St. Elizabeth Hospital, Chicago, obstetrics, gynecology.
198. Loretto Hospital, Chicago, obstetrics, psychiatry.
199. Children's Memorial Hospital, City of Chicago Municipal Tuberculosis Sanatorium, pediatrics, tuberculosis.
200. Salem Hospital, Salem, Massachusetts, surgery.
201. Mount Carmel Mercy Hospital, Detroit, pediatrics.
202. Ingham Sanatorium, Lansing, medicine, surgery.
203. Pontiac State Hospital, Oakland County Tuberculosis Sanitarium.
204. Kansas City General Hospital #1, Kansas City, Missouri.
205. Margaret Hague Maternity Hospital, Berthold S. Pollak Hospital for Chest Diseases, Jersey City.
206. Margaret Hague Maternity Hospital, Jersey City.
207. Anthony N. Brady Maternity Home, Albany, obstetrics.
208. Sydenham Hospital, Baltimore, contagious diseases.
209. Brooklyn Thoracic Hospital, tuberculosis.
210. Children's Hospital, Buffalo, pediatrics.
211. Emergency Hospital, Buffalo, traumatic surgery.
212. Emergency Hospital, Children's Hospital, Buffalo, emergency, pediatrics.
213. Edward J. Meyer Memorial Hospital; Allied Hospitals of the Sisters of Charity include Emergency Hospital, Louise de Marillac Hospital and Sisters Hospital.
214. Chemung County Sanatorium, Elmira, New York.
215. Harlem Hospital, New York City, obstetrics.
216. Beth Israel Hospital, New York City, obstetrics. obstetrics, gynecology, surgery; Rochester General Hospital.
217. Geneva General Hospital, Geneva.
218. Bradford Hospital, Bradford, Pennsylvania, surgery; Frederick Ferris Thompson Hospital, Canandaigua, New York, surgery; Tompkins County Memorial Hospital, Ithaca, New York, surgery; Corning Hospital, Corning, New York, pediatrics, obstetrics, gynecology; Genessee Hospital, Rochester, New York, medicine, obstetrics, gynecology, surgery; Rochester General Hospital, Rochester, New York, surgery.
219. Rotation service established between Hospital of the Good Shepherd; Syracuse Memorial Hospital; City Hospital and Syracuse Psychopathic Hospital; comprising Syracuse University Medical Center Hospitals.
220. North Carolina Orthopedic Hospital, Gastonia, orthopedics; Sydenham Hospital, Baltimore, pediatrics; Charity Hospital of Louisiana, New Orleans.
221. Forsyth County Sanatorium, Winston-Salem, North Carolina, tuberculosis.
222. Children's Hospital, Akron, pediatrics.
223. Edwin Shaw Sanatorium, tuberculosis; Summit County Receiving Hospital, Cuyahoga Falls, psychiatry.
224. Children's Hospital, Cincinnati, pediatrics.
225. Dunham Hospital, tuberculosis; Hamilton County Home and Chronic Disease Hospital, Cincinnati, chronic diseases.
226. Cincinnati General Hospital, contagious diseases, pediatrics.
227. Cincinnati General Hospital, pediatrics.
228. Cincinnati General Hospital, contagion.
229. St. Ann's Maternity Hospital, Cleveland, obstetrics.
230. Children's Hospital, Columbus, pediatrics.
231. Children's Hospital, St. Francis Hospital, Columbus, pediatrics, medicine.
232. Shriner's Hospital for Crippled Children, Portland, orthopedics.
233. St. Vincent's Hospital, Portland, obstetrics.
234. Providence Hospital; Multnomah Hospital, Portland, pediatrics and outpatient service.
235. Hospital of the University of Pennsylvania, Philadelphia, obstetrics.
236. Philadelphia Hospital for Contagious Diseases.
237. Children's Hospital, Philadelphia, pediatrics.
238. Rosella Foundling and Maternity Hospital, Pittsburgh, obstetrics.
239. Children's Hospital; Eye, Ear, Nose and Throat Hospital; Municipal Hospital; Elizabeth Steel Magee Hospital, Pittsburgh.
240. Municipal Hospital, Pittsburgh, contagion.
241. West Side Hospital, Scranton, obstetrics.

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APPROVED RESIDENCIES AND FELLOWSHIPS

Council on Medical Education and Hospitals of the American Medical Association
535 North Dearborn Street, Chicago 10

Revised to May 1, 1949

Hospitals, 1,187; Assistant Residencies, Residencies and Fellowships, 17,293

The following services are approved by the Council on Medical Education and Hospitals as meeting the requirements of the Essentials of Approved Residencies and Fellowships. In those specialties in which certifying boards have been established approval is extended in concurrence with the Board concerned. The number of years of training for which approval has been granted is indicated in the column, "Length of Approved Program (years)." Residencies in which this designation does not appear have been approved without specifying the number of years for which they are accredited.

The (*) indicates hospitals approved for intern training. All hospitals included in the internship list are also accredited for general residency training. This category will be replaced by the residency in general practice in the next Internship and Residency Number.

The (†) represents temporary approval, pending formal inspection, in accordance with the plan announced in THE JOURNAL, March 2, 1946, p. 586. Granting of approval on this basis has been terminated by action of the Council and the Advisory Board for Medical Specialties. Hospitals temporarily approved prior to this action currently are being inspected to determine whether or not approval should be continued and, if so, the number of years of training for which they will be accredited.

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1. ALLERGY

The following services are approved by the Council and the American Board of Internal Medicine
Hospitals, 12; Assistant Residencies and Residencies, 30

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Salary ($) (Month)
Veterans Administration							
†Veterans Admin. Hospital	Aspinwall, Pa.	L. H. Criep	508	.....	2	7/1	n
Nonfederal							
†Northwestern University Medical Center	Chicago		...	.....	3	.....	.....
†Johns Hopkins Hospital*[1]	Baltimore		...	9,389	1	.....	.....
†Massachusetts General Hospital*	Boston	W. S. Burrage	(Included in Medicine)		14	.....	.....
Jewish Hospital*	Brooklyn		...	.....	..	.....	.....
†Buffalo General Hospital*	Buffalo	H. Osgood	...	1,918	1	.....	.....
Roosevelt Hospital*[1]	New York City	R. A. Cooke	77	37,747	2	7/1	$200.00
†University Hospital*	New York City	R. W. Robertazzi	...	11,257	(Included in Medicine)		
†Montefiore Hospital*	Pittsburgh	L. H. Criep	17	1,971	1	7/1	50.00
†University of Virginia Hospital*[1]	Charlottesville, Va.	O. W. Swineford	...	1,175	3	7/1	.....
†Medical College of Virginia, Hospital Division*[1]	Richmond, Va.	W. B. Blanton	...	3,126	2	7/1	.....
†Milwaukee County Hospital*[1]	Milwaukee		...	1,261	1	.....	158.02

2. ANESTHESIOLOGY

The following services are approved by the Council and the American Board of Anesthesiology
Hospitals, 214; Assistant Residencies and Residencies, 650

Name of Hospital	Location	Chief of Service	Total Anesthetics	Inhalation Anesthetics	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Salary ($) (Month)
United States Army							
†Letterman General Hospital*	San Francisco	E. P. Shannon	5,005	1,831	1	.....	n
Fitzsimons General Hospital*	Denver	J. H. Forsee	3,626	1,894	4	.....	n
Walter Reed General Hospital*	Washington, D. C.	J. Gardiner	6,610	2,630	2	1, 7	n
†Oliver General Hospital*	Augusta, Ga.	C. H. Mitchell	2,956	1,360	3	1/1	n
†Brooke General Hospital*	San Antonio, Texas	F. C. Dye	7,696	1,157	5	.....	n
United States Navy							
U. S. Naval Hospital*	Long Beach, Calif.		.....	.....	..	.....	n
†U. S. Naval Hospital*	Oakland, Calif.		.....	.....	...	.....	n
†U. S. Naval Hospital*	Bethesda, Md.	H. A. Gross	3,608	1,633	4	.....	n
†U. S. Naval Hospital*	Chelsea, Mass.	M. L. Connerley	2,008	369	..	.....	n
†U. S. Naval Hospital*	St. Albans, N. Y.	J. G. Kurfees	2,422	334	4	.....	n
†U. S. Naval Hospital*	Philadelphia	S. Whitehouse	3,769	440	1	.....	n
United States Public Health Service							
†U. S. Marine Hospital*[1]	Stapleton, N. Y.	C. L. Herbert	6,358	1,711	2	7/1	n
Veterans Administration							
Veterans Admin. Hospital[1]	Los Angeles	N. H. Rupp	4,997	421	8	.....	n
Veterans Admin. Hospital[1]	San Francisco	W. B. Neff	1,456	593	4	7/1	n
†Veterans Admin. Hospital	Van Nuys, Calif.	W. Greene	3,361	247	2	1/1, 7/1	n

Numerical and other references will be found on page 225.

2. ANESTHESIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Total Anesthetics	Inhalation Anesthetics	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Beginning Stipend (Month)
Veterans Admin. Hospital [1]	Ft. Logan, Colo.		.....	.....	..	.....	n
†Veterans Admin. Hospital [1]	Washington, D. C.	L. M. Jones	2,097	372	1	7/1	n
†Veterans Admin. Hospital [1]	Chamblee, Ga.	W. H. Galvin	2,706	314	1	7/1	n
Veterans Admin. Hospital	Hines, Ill.	W. A. Conroy	5,902	1,670	8	7/1, 1/2	n
Veterans Admin. Center	Des Moines, Iowa	J. L. Bailey	2,847	285	5	1, 7	n
†Veterans Admin. Hospital	Indianapolis	L. B. Mueller	1,532	266	1	1, 7	n
†Veterans Admin. Hospital	Des Moines, Iowa	J. L. Bailey	2,847	285	5	1, 7	n
Veterans Admin. Center	Wadsworth, Kan.	R. S. McKee	3,670	190	2	1, 7	n
†Veterans Admin. Hospital [1]	Louisville, Ky.	L. A. Gittelson	4,300	600	3	.....	n
Veterans Admin. Hospital [1]	New Orleans, La.	R. L. Gleason	2,008	271	1	7/1	n
Veterans Admin. Hospital [1]	Boston		2,806	451	3	.....	n
Veterans Admin. Hospital [1]	Framingham, Mass.		3,836	353	3	.....	n
Veterans Admin. Hospital [1]	Minneapolis		4,249	687	10	.....	n
†Veterans Admin. Hospital [1]	Jefferson Bks., Mo.		3,790	806	3	.....	n
†Veterans Admin. Hospital	Batavia, N. Y.		1,519	342	2	7/1	n
Veterans Admin. Hospital	New York City	P. K. Sauer	5,916	1,455	8	1, 7	n
†Veterans Admin. Hospital [1]	Staten Island, N. Y.	B. Ciliberti	1,943	497	4	7/1	n
†Veterans Admin. Hospital [1]	Oklahoma City	H. A. Bennett	1,231	157	1	7	n
Veterans Admin. Hospital	Portland, Ore.	J. H. Hutton	2,779	750	2	1/1, 7/1	n
Veterans Admin. Hospital	Aspinwall, Pa.	I. W. Flamberg	3,717	819	2	7/1	n
†Veterans Admin. Hospital [1]	Memphis, Tenn.	R. Popper	5,037	845	1	7/1	n
†Veterans Admin. Hospital	Nashville, Tenn.	B. H. Robbins	1,456	273	2	7/1	n
Veterans Admin. Hospital [1]	Dallas, Texas		1,125	118	1	1/1, 7/1	n
Veterans Admin. Hospital [1]	McKinney, Texas	F. A. D. Alexander	1,642	443	2	.....	n
Veterans Admin. Center [1]	White River Jct., Vt.	R. E. Lapointe	1,515	168	2	7/1	n
†Veterans Admin. Hospital [1]	Richmond, Va.	I. Gold	3,888	917	2	7/1	n
Veterans Admin. Center [1]	Milwaukee, Wis.	R. A. Tella	2,800	1,820	5	7/1	n
Nonfederal							
Jefferson-Hillman Hospitals* [1]	Birmingham, Ala.	A. McNeal	8,435	7,321	1	.....	.....
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company*	Fairfield, Ala.	F. B. Robinson, Jr.	3,685	2,278	1	7/1	$225.00
Los Angeles County Hospital* [1]	Los Angeles	J. B. Dillon	.....	.....	15	Varies	165.00
White Memorial Hospital* [1]	Los Angeles	L. D. Lee	4,998	756	4	7/1	140.00
†Peralta Hospital [1]	Oakland, Calif.	F. E. Davis	6,084	2,385	4	7/1	125.00
Samuel Merritt Hospital	Oakland, Calif.	B. M. Anderson	5,277	3,413	1	1/18	110.00
Children's Hospital* [1]	San Francisco	H. D. Lapp	3,376	1,695	2	7/1	50.00
Franklin Hospital* [1]	San Francisco	J. L. Cardwell	5,306	3,358	1	7/1	100.00
French Hospital* [1]	San Francisco		3,307	1,091	..	.....	.....
St. Joseph's Hospital*	San Francisco	C. Wykoff	4,253	1,110	..	.....	200.00
Stanford University Hospitals* [1]	San Francisco	W. B. Neff	8,469	3,440	3	7/1	50.00
University of California Hospital* [1]	San Francisco	F. J. Murphy	.....	.....	5	7/1, 8/1, 9/1	50.00
Colorado General Hospital* [1]	Denver, Colo.	P. A. Lief	2,419	911	4	7/1	75.00
†Denver General Hospital* [1]	Denver, Colo.	P. A. Lief	2,987	1,423	2	7/1	40.00
Bridgeport Hospital*	Bridgeport, Conn.	D. M. Massey	5,595	2,586	1	10/1	100.00
Hartford Hospitals* [1, 2]	Hartford, Conn.	R. M. Tovell	26,938	11,471	38	.....	50.00
†St. Francis Hospital* [1]	Hartford, Conn.	S. J. Martin	12,448	6,937	9	10, 1, 7	75.00
Grace-New Haven Community Hospital							
†Grace Unit*	New Haven, Conn.		3,118	1,312	..	7/1	52.00
†New Haven Unit (University Service)* [1]	New Haven, Conn.	L. J. Hampton	5,511	3,134	6	7/1	40.00
†Hospital of St. Raphael* [1]	New Haven, Conn.	M. Garofalo	.....	.....	..	7/1	75.00
†St. Mary's Hospital* [1]	Waterbury, Conn.	W. Grillo	5,413	1,619	2	.....	.....
†Waterbury Hospital* [1]	Waterbury, Conn.		6,437	2,154	1	.....	100.00
†Memorial Hospital* [1]	Georgetown, Del.	R. E. Allen	3,276	1,116	1	7/1	110.00
†Children's Hospital	Washington, D. C.		3,305	3,288	..	.....	.....
Doctors Hospital*	Washington, D. C.	C. W. Hyde	4,885	609	2	.....	.....
Gallinger Municipal Hospital* [1]	Washington, D. C.		8,097	3,768	2	7/1	100.00
†Garfield Memorial Hospital* [1]	Washington, D. C.	E. B. Macon	.....	.....	..	.....	.....
†Georgetown University Hospital*	Washington, D. C.	E. B. Touhy	6,038	4,830	8	.....	25.00
George Washington University Hospital*	Washington, D. C.	L. Mousel	2,754	2,078	9	.....	50.00
†Riverside Hospital [1]	Jacksonville, Fla.		1,147	750	1	9	.....
University Hospital* [1]	Augusta, Ga.	P. P. Volpitto	6,254	4,182	4	7	40.00
†Cook County Hospital*	Chicago	F. Grem	14,852	8,465	2	1, 7	32.00
Michael Reese Hospital* [1]	Chicago	B. Stodsky	8,769	6,024	4	1, 7	25.00
†Mount Sinai Hospital* [1]	Chicago	R. Weyl	5,301	4,000	1	7/1	50.00
†Passavant Memorial Hospital* [1]	Chicago		3,748	2,550	1	.....	.....
Presbyterian Hospital* [1]	Chicago	C. D. Anderson	5,091	2,091	2	.....	50.00
†Research and Educational Hospitals* [1]	Chicago	L. J. Loveseth	2,588	2,276	6	7/1	55.00
St. Luke's Hospital* [1]	Chicago	W. A. Conroy	6,264	5,623	4	7/1	25.00
University of Colcago Clinics* [1]	Chicago	H. Livingstone	8,330	4,917	8	7/1	25.00
Wesley Memorial Hospital* [1]	Chicago	M. Karp	7,531	5,671	3	.....	25.00
Evanston Hospital* [1]	Evanston, Ill.	J. E. Remlinger	5,955	2,953	3	.....	50.00
Indianapolis General Hospital*	Indianapolis	L. J. Mueller	20,307	2,321	2	7/1	100.00
†Indiana University Medical Center*	Indianapolis	V. K. Stoelting	4,540	2,990	3	7/1	68.33
Methodist Hospital* [1]	Indianapolis	J. M. Whitehead	19,579	11,508	4	7/1	200.00
†Ball Memorial Hospital* [1]	Muncie, Ind.	W. B. Adams	6,785	5,738	1	7/1	100.00
†Memorial Hospital*	South Bend, Ind.	R. Rosenheimer	5,550	1,461	1	.....	15.00
University Hospitals* [1]	Iowa City	S. Cullen	8,925	5,013	8	7/1	50.00
University of Kansas Medical Center* [1]	Kansas City, Kan.	P. H. Lorhan	4,828	3,186	5	7/1, 1/1	.....
†St. Joseph Hospital*	Lexington, Ky.	W. R. Sergent	7,200	5,000	..	.....	.....
Louisville General Hospital*	Louisville, Ky.	M. Davis, Jr.	3,112	1,927	3	7/1	45.00
Charity Hospital of Louisiana* [1]	New Orleans		10,617	6,284	9	7/1	25.00
†Ochsner Foundation Hospital [1, 41]	New Orleans	G. B. Grant	3,697	1,659	4	1/1, 7/1	150.00
†Touro Infirmary*	New Orleans		.....	.....	..	.....	.....
†Eastern Maine General Hospital*	Bangor, Maine		.....	.....	..	.....	.....
†Central Maine General Hospital* [1]	Lewiston, Maine	G. Clapperton	3,547	1,847	2	1/1	.....
†Maine General Hospital*	Portland, Maine		.....	.....	..	.....	.....
†University Hospital* [1]	Baltimore, Md.	A. T. Nelson	6,795	1,533	4	7/1	50.00
†Beverly Hospital*	Beverly, Mass.	J. H. Fine	4,154	1,533	1	7/1	Varies
†Boston City Hospital* [1]	Boston	S. C. Wiggin	21,719	6,165	16	.....	.....
Faulkner Hospital*	Boston		.....	.....	1	.....	.....
Lahey Clinic	Boston		.....	.....	10	.....	.....
Massachusetts General Hospital*	Boston	H. K. Beecher	.....	.....	7	.....	.....
Massachusetts Memorial Hospitals* [1]	Boston	J. G. Arrowood	4,307	2,294	6	9/1	50.00
New England Hosp. for Women and Children* [1]	Boston	E. Bartlett	3,571	2,097	1	.....	50.00
St. Elizabeth's Hospital*	Boston	L. Zentgraf	6,068	3,344	1	.....	.....

Numerical and other references will be found on page 225.

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2. ANESTHESIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Total Anesthetics	Inhalation Anesthetics	Asst. Res. and Residencies Offered	Beginning of Service (1959)	Beginning Stipend (Month)
Cambridge City Hospital*	Cambridge, Mass.	D. R. Branch	3,247	1,575	1	8/17	$ 58.33
†Mount Auburn Hospital*[1]	Cambridge, Mass.	J. H. Buskirk	5,139	2,514	2	9/1	.....
Newton-Wellesley Hospital*[1]	Newton, Mass.	R. S. Hunt	5,019	2,112	1	7/1	100.00
†Salem Hospital*	Salem, Mass.	R. R. Richardson	4,379	2,712	1	.....	50.00
†Memorial Hospital*[1]	Worcester, Mass.	C. B. Hinds	6,467	1,909	..	.....	100.00
†St. Vincent's Hospital*	Worcester, Mass.	W. J. Martin	5,204	2,579	1	7/1	41.67
City of Detroit Receiving Hospital*[1]	Detroit	I. B. Taylor	7,309	2,481	5	7/1	188.00
Providence Hospital*	Detroit	N. M. Bittrich	6,358	2,885	1	7/1	140.00
Butterworth Hospital*[1]	Grand Rapids, Mich.	M. L. Byrd	5,248	2,470	1	7/1	100.00
University of Minnesota Hospitals*[1]	Minneapolis	R. Knight	4,214	2,647	9	.....	.....
Mayo Foundation	Rochester, Minn.	J. S. Lundy	.....	.....	15	.....	92.50
Ancker Hospital*	St. Paul	R. Knight	4,622	1,084	3	.....	150.00
Kansas City General Hospital, No. 1*	Kansas City, Mo.	E. Grandstaff	3,713	870	..	.....	50.00
Research Hospital*[1]	Kansas City, Mo.	C. R. McCubbin	.....	.....	2	7/1	.....
†Mary Hitchcock Memorial Hospital*[1]	Hanover, N. H.	R. H. Barrett	5,450	1,611	2	7/1	150.00
†Elliot Hospital[1]	Manchester, N. H.	H. Elliot	3,997	1,671	..	.....	.....
West Jersey Hospital*	Camden, N. J.	K. S. Russell	.....	.....	1	4/1	125.00
Jersey City Hospital*	Jersey City, N. J.	W. Gleeson	6,098	1,734	5	.....	.....
†St. Joseph Hospital*	Paterson, N. J.	H. G. Walker	3,951	2,838	..	.....	150.00
Albany Hospital*[1]	Albany, N. Y.	M. H. Harmel	7,212	.....	8	7/1	41.67
†Beth-El Hospital*[1]	Brooklyn	A. Goldfeder	6,574	1,587	1	7	100.00
Jewish Hospital*[1]	Brooklyn	I. M. Pallin	12,163	3,869	6	7	100.00
†Maimonides Hospital*[1]							
†Beth Moses Division*	Brooklyn	J. Barcham	2,320	983	1	7/1	125.00
†Israel Zion Division*[1]	Brooklyn	L. Holzmann	9,480	6,029	..	7/1	75.00
†Methodist Hospital*[1]	Brooklyn	R. Waelsch	5,206	.....	2	.....	.....
†St. Catherine's Hospital*[1]	Brooklyn		.....	.....	..	.....	.....
†Unity Hospital*	Brooklyn		.....	.....	..	7/1	100.00
Bunalo General Hospital*	Buffalo	C. J. Durshordwe	11,427	3,762	3	7/1	50.00
†Edward J. Meyer Memorial Hospital*	Buffalo	P. W. Searles	.....	.....	2	.....	100.00
Millard Fillmore Hospital*	Bunalo		8,789	1,415	..	.....	50.00
†Mary Immaculate Hospital*[1]	Jamaica, N. Y.	G. Frank	5,243	4,139	3	7/1	75.00
Bellevue Hospital, Div. III-N. Y. Univ.*[1]	New York City	E. A. Rovenstine	.....	.....	12	.....	.....
†Beth Israel Hospital*[1]	New York City	S. G. Hetsney	7,568	4,984	3	1/1, 7/1	50.00
Flower and Fifth Avenue Hospitals*[1]	New York City	D. E. Brace	7,482	5,073	2	7/1	.....
French Hospital*[1]	New York City		2,035	1,791	3	.....	100.00
Goldwater Memorial Hospital*[1]	New York City	E. A. Rovenstine	1,140	332	2	7/1	175.00
Hospital for Joint Diseases*[1]	New York City	A. Beier	3,913	2,417	2	7/1	40.40
†Hospital for Special Surgery[1]	New York City	C. Bunstein	2,717	2,156	2	1/1, 7/1	166.00
†Lenox Hill Hospital*[1]	New York City	M. Fries	9,138	6,174	2	7/1	50.00
Metropolitan Hospital*[1]	New York City	F. E. Fierro	3,111	2,117	5	.....	.....
Montefiore Hospital for Chronic Diseases*[1]	New York City	B. Cohen			1	.....	.....
Mount Sinai Hospital*[1]	New York City	B. H. Eilasberg	8,850	5,544	3	.....	50.00
†New York City Hospital*[1]	New York City	P. M. Wood	2,339	778	3	7/1	229.16
†New York Hospital*	New York City	J. Artusio	.....	.....	1	7/1	25.00
New York Polyclinic Medical School and Hospital*[1]	New York City		6,411	3,344	4	7/1	100.00
Presbyterian Hospital*[1]	New York City	V. Apgar	15,988	9,854	18	.....	41.66
†St. Clare's Hospital*[1]	New York City	R. A. Rose	14,332	2,320	1	7/1	25.00
St. Luke's Hospital*	New York City	G. E. Burford	7,369	3,327	4	7	150.00
St. Vincent's Hospital*[1]	New York City	V. J. Counts	4,789	3,481	1	7/1	100.00
†Sydenham Hospital*[1]	New York City	C. Fleshman	2,395	1,530	1	7	35.00
University Hospital*[1]	New York City	R. W. Robertazzi	5,460	4,180	6	.....	.....
Rochester General Hospital*[1]	Rochester, N. Y.	J. F. Kellogg	5,912	3,564	2	.....	.....
†St. Mary's Hospital*[1]	Rochester, N. Y.	D. Bianchi	5,817	3,146	..	7/1	125.00
†Syracuse Univ. Medical Center Hospitals*	Syracuse, N. Y.		.....	.....	..	.....	.....
Grasslands Hospital*[1]	Valhalla, N. Y.	H. F. Bishop	1,126	637	2	7	.....
†Duke Hospital*[1]	Durham, N. C.	R. Martin	9,928	6,467	2	7/1	83.33
†Mercy Hospital*	Canton, Ohio	J. A. McNalley	9,265	5,588	..	.....	.....
Christ Hospital*	Cincinnati	L. E. Larrick	6,957	1,932	1	7/1	75.00
Cleveland Clinic Hospital[1]	Cleveland	D. E. Hale	9,356	1,407	4	7/1	100.00
†Mount Sinai Hospital*	Cleveland	S. Katz	8,369	7,130	3	7/1	62.50
St. Luke's Hospital*	Cleveland	B. B. Sankey	10,550	6,242	1	6/25	75.00
†Woman's Hospital[1]	Cleveland		3,052	2,147	..	.....	.....
Ohio State University Hospital*[1]	Columbus, Ohio	J. J. Jacoby	6,545	2,055	3	7/1	50.00
Huron Road Hospital*[1]	East Cleveland, Ohio	J. Whitacre	9,241	5,451	5	7/1	100.00
†Lakewood Hospital*	Lakewood, Ohio	S. Gardner	4,381	2,957	1	.....	.....
†Mansfield General Hospital	Mansfield, Ohio	C. R. Damron			2	.....	.....
Maumee Valley Hospital*	Toledo, Ohio		1,004	430	1	.....	125.00
†Youngstown Hospital*	Youngstown, Ohio	A. J. Fisher	11,706	5,612	1	7/1	100.00
University Hospitals*[1]	Oklahoma City	H. A. Bennett	3,900	2,700	4	7/1	35.00
University of Oregon Medical School Hospitals and Clinics*[1]	Portland Ore.	F. P. Haugen	10,206	2,519	4	7/1	75.00
†Abington Memorial Hospital*	Abington, Pa.	R. Malo	5,860	3,842	2	10/1	100.00
†Harrisburg Hospital*[1]	Harrisburg, Pa.	E. F. Toth	8,335	5,656	2	1/1, 7/1	100.00
Hahnemann Hospital*[1]	Philadelphia	H. S. Ruth	9,015	3,805	5	.....	25.00
Hosp. of the University of Pennsylvania*[1]	Philadelphia	R. Dripps	11,712	3,840	13	Varies	.....
†Hospital of the Woman's Medical College of Pennsylvania*[1]	Philadelphia	W. Weiss	3,092	1,826	1	7/1	60.00
†Jewish Hospital*[1]	Philadelphia		.....	.....	..	.....	.....
†Lankenau Hospital*[1]	Philadelphia	C. S. Turville	6,174	4,164	1	7/1	50.00
†Mount Sinai Hospital*[1]	Philadelphia	A. R. Rose	4,495	2,235	3	6/21	100.00
†Philadelphia General Hospital*[1]	Philadelphia		4,911	2,375	5	7/1	70.00
Presbyterian Hospital*	Philadelphia	S. Schotz	.....	.....	1	.....	25.00
Temple University Hospital*[1]	Philadelphia	C. B. Hickcox	14,562	5,078	4	7/1	.....
†Women's Homeopathic Hospital*	Philadelphia		2,250	1,624	1	7/1	200.00
†Allegheny General Hospital*	Pittsburgh	R. L. Patterson	7,833	2,611	3	7/1	100.00
†Mercy Hospital*[1]	Pittsburgh	F. F. Foldes	10,734	4,812	3	9/1	100.00
†Montefiore Hospital*	Pittsburgh	I. Greenfield	5,554	3,175	1	7/1	50.00
†St. Francis Hospital*	Pittsburgh	G. J. Thomas	7,384	2,010	3	7/1	100.00
Reading Hospital*[1]	Reading	P. D. Woodbridge	6,619	3,837	4	7/1	100.00
†Robert Packer Hospital*	Sayre, Pa.	W. Brehm	5,761	2,335	..	7/1	150.00
†Christian H. Buhl Hospital	Sharon, Pa.	M. E. Cushnie	4,184	3,759	2	.....	250.00
Rhode Island Hospital*[1]	Providence, R. I.	M. Saklad	6,991	3,318	2	7/1	50.00
Baroness Erlanger Hospital*[1]	Chattanooga, Tenn.		.....	.....	1	.....	.....
†John Gaston Hospital*	Memphis, Tenn.	J. L. McGehee	4,005	2,780	2	.....	.....
†Vanderbilt University Hospital*[1]	Nashville, Tenn.	B. H. Robbins	4,586	3,240	1	7/1	35.41

Numerical and other references will be found on page 225.

2. ANESTHESIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Total Anesthetics	Inhalation Anesthetics	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
†Baylor University Hospital*	Dallas, Texas	E. F. Weir	15,138	10,186	1	7/1	$ 50.00
University of Texas Medical Branch Hosps.*[1]	Galveston, Texas	H. C. Slocum	4,200	2,710	6	1, 7	50.00
Hermann Hospital*[1]	Houston, Texas	L. F Schuhmacher, Jr.	5,359	1,004	3	.....	50.00
Dr. W. H. Groves Latter-Day Saints Hosp.*[1]	Salt Lake City	S. Smith	10,978	8,426	1	7/1	75.00
†Bishop DeGoesbriand Hospital*[1]	Burlington, Vt.	J. Abajian	1,105	523	2	1/1	100.00
Mary Fletcher Hospital*	Burlington, Vt.	J. Abajian	2,274	845	2	7/1	50.00
King County Hospital*	Seattle, Wash.	J. E. Mathwig	3,208	2,039	2	7/1	90.00
†Providence Hospital*[1]	Seattle, Wash.	C. P. Wangeman	6,586	5,092	..	.....	.....
†Virginia Mason Hospital*	Seattle, Wash.	D. C. Moore	3,520	2,805	2	.....	75.00
†Tacoma General Hospital*	Tacoma, Wash.	.....	.....	.....	..	.....	.....
State of Wisconsin General Hospital*[1]	Madison, Wis.	J. T. McCoy	5,307	4,548	8	7	25.00
Columbia Hospital*	Milwaukee	R. B. Dodd	3,970	1,951	2	.....	.....
†Milwaukee County Hospital*[1]	Milwaukee	.....	2,832	1,153	..	7/1, 7/15, 8/1	158.00
†Mt. Sinai Hospital*[1]	Milwaukee	.....	3,621	2,856	1	7/1	75.00

3. CARDIOVASCULAR DISEASE

The following services are approved by the Council and the American Board of Internal Medicine Hospitals, 22; Assistant Residencies and Residencies, 66

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
United States Army									
†Letterman General Hospital*	San Francisco	.....	(Included in Internal Med.)				1	.....	n
Fitzsimons General Hospital*	Denver, Colo.	.....	.....	.....	..	..	..	.....	n
†Walter Reed General Hospital*	Washington, D. C.	J. S. Taylor	242	4,021	17	14	1	1, 7	n
United States Navy									
†U. S. Naval Hospital*	Bethesda, Md.	R. C. Parker	686	451	64	62	..	.....	n
Veterans Administration									
Veterans Admin. Hospital	Hines, Ill.	L. A. Baker	1,044	.....	157	92	2	.....	n
Nonfederal									
†LaRabida Jackson Park Sanitarium[1]	Chicago	H. G. Poncher	.....	0	4	4	6	1, 4, 7, 10/1	$75.00
†Michael Reese Hospital*	Chicago	L. N. Katz	.....	.....	..	..	13	1/1, 7	.....
Indiana University Medical Center*[1]	Indianapolis	.....	(Included in Internal Med.)				..	1	.....
House of the Good Samaritan[1]	Boston	.....	197	.....	5	3	4	7/1	50.00
Massachusetts General Hospital*	Boston	P. D. White	(Included in Internal Med.)				1	1	.....
Henry Ford Hospital*[1]	Detroit	F. J. Smith	823	14,726	91	35	4	7/1	200.00
†Irvington House[1]	Irvington, N. Y.	A. C. DeGraff	100	480	..	..	1	7	200.00
†Mount Sinai Hospital*[1]	New York City	.....	.....	.....	..	..	7	.....	50.00
†St. Francis Sanatorium for Cardiac Children[1]	Roslyn, L. I., N. Y.	L. M. Taran	261	.....	5	2	3	7/1	200.00
†Duke Hospital*[1]	Durham, N. C.	.....	(Included in Internal Med.)				14	.....	.....
White Cross Hospital*	Columbus, Ohio	.....	(Included in Internal Med.)				..	.....	.....
Hospital of the Woman's Medical College of Pennsylvania*[1]	Philadelphia	W. G. Leaman	.....	.....	..	..	1	.....	.....
Pennsylvania Hospital*	Philadelphia	J. B. Van der Veer	.....	2,875	..	9	3	1/1, 7/1	20.00
†Philadelphia General Hospital*[1]	Philadelphia	.....	(Included in Internal Med.)				3	.....	.....
St. Francis Hospital*	Pittsburgh	A. P. D'Zmura	400	104	101	17	1	7/1	100.00
Rhode Island Hospital*[1]	Providence, R. I.	F. B. Cutts	(Included in Internal Med.)				1	7/1	50.00
†University of Texas Medical Branch Hospitals*[1]	Galveston, Texas	.....	.....	.....	..	..	..	.....	.....

4. CONTAGIOUS DISEASES

Hospitals, 19; Assistant Residencies and Residencies, 77

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
United States Navy									
U. S. Naval Hospital*	Great Lakes, Ill.	H. H. Carroll	806	54	2	2	1	.....	n
Nonfederal									
Los Angeles County Hospital*[1]	Los Angeles	A. G. Bower	3,472	.....	183	118	3	Varies	$165.00
Children's Hospital*[1]	San Francisco	E. B. Shaw	408	.....	8	4	1	7/1	50.00
J. J. McCook Memorial Hospitals*[1]	Hartford, Conn.	C. L. Thenebe	614	.....	13	7	1	7/1	230.00
Cook County Hospital*[1]	Chicago	H. Leichenger	1,100	.....	50	..	1	1, 7	32.00
Municipal Contagious Disease Hospital[1]	Chicago	A. L. Hoyne	1,701	4,354	57	54	6	1/1	147.00
Sydenham Hospital[1]	Baltimore	.....	982	.....	36	27	3	1	100.00
Boston City Hospital*[1]	Boston	E. H. Place	1,511	.....	14	8	6	.....	.....
Massachusetts Memorial Hospitals*[1]	Boston	L. Weinstein	1,359	.....	98	22	6	7/1	50.00
Belmont Hospital	Worcester, Mass.	W. D. MacDonald	489	.....	4	2	2	1/1, 7/1	155.00
Herman Kiefer Hospital[1]	Detroit	D. C. Young	1,521	.....	70	40	5	7/1	365.00
Kansas City General Hospital No. 1*	Kansas City, Mo.	C. R. Ferris	432	.....	16	15	1	.....	50.00
St. Louis City Hospital*[1]	St. Louis	I. R. Maxwell	651	.....	22	11	1	.....	.....
Essex County Hosp. for Contagious Diseases[1]	Belleville, N. J.	E. L. Smith	2,095	.....	20	14	6	1/1, 7/1	75.00
Kingston Avenue Hospital[1]	Brooklyn	T. Glynn	4,001	.....	42	18	9	1/1, 7/1	130.00
Queens General Hospital*[1]	Jamaica, N. Y.	H. A. Reisman	456	.....	3	3	2	7/1	80.00
Willard Parker Hospital[1]	New York City	.....	5,371	.....	40	29	16	1/1, 7/1	50.00
City Hospital*[1]	Cleveland	J. A. Toomey	1,313	.....	77	25	4	7/1	60.00
Philadelphia Hosp. for Contagious Diseases[1]	Philadelphia	A. O. LaBocetta	2,699	.....	64	35	3	1/1	100.00

Numerical and other references will be found on page 225.

5. DERMATOLOGY AND SYPHILOLOGY

The following services are approved by the Council and the American Board of Dermatology and Syphilology Hospitals, 79; Assistant Residencies and Residencies, 299

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
United States Army										
Letterman General Hospital*	San Francisco	R. S. Higdon	368	4,534	0	0	5	.....	2	n
†Army Institute of Pathology [1]	Washington, D. C.		.....	.....	..	..	..	.....	1	n
Walter Reed General Hospital*	Washington, D. C.	L. S. Leland	345	5,118	..	..	3	1, 7	3	n
Brooke General Hospital*	San Antonio, Tex.	C. B. White	859	11,858	2	2	5	.....	2	n
United States Navy										
U. S. Naval Hospital*	San Diego, Calif.	L. K. MacClatchie	1,085	2,904	..	..	2	.....	1	n
U. S. Naval Hospital*	St. Albans, N. Y.	C. D. Bell	410	2,315	..	..	5	.....	2	n
U. S. Naval Hospital*	Philadelphia	R. L. Gilman	172	7,960	2	1	5	.....	2	n
United States Public Health Service										
U. S. Marine Hospital* [1]	Stapleton, S. I., N. Y.	C. B. Mayes	2,739	20,497	..	..	4	7/1	2	n
Veterans Administration										
Veterans Administration Center [1]	Los Angeles, Calif.		343	6,220	7	4	5	.....	2	n
Veterans Admin. Hospital [1]	Van Nuys, Calif.	M. E. Obermayer	407	3,385	2	2	1	7/1, 1/1	1	n
†Veterans Admin. Hospital	Hines, Ill.	E. A. Oliver	1,032	.....	7	4	2	7/1, 1/1	2	n
Veterans Admin. Hospital	New Orleans, La.	C. B. Kennedy	175	1,457	1	1	1	7/1	1	n
†Veterans Admin. Hospital [21]	Fort Howard, Md.	M. Sullivan	(Included in Medicine)				3	7/1	2	n
†Veterans Admin. Hospital	Minneapolis		350	.....	2	2	3	.....	3	n
Veterans Admin. Hospital	New York City	B. Straus	397	5	2	1	4	1	2	n
Veterans Admin. Hospital	Aspinwall, Pa.	S. H. Crawford	160	.....	1	1	2	7/1	1	n
Nonfederal										
Jefferson-Hillman Hospital* [1]	Birmingham, Ala.	R. Noojin	264	7,456	..	..	2	.....	3	.....
Los Angeles County Hospital* [1]	Los Angeles	S. Ayres	864	15,244	30	10	5	Varies	3	$165.00
†White Memorial Hospital*	Los Angeles	C. E. Counter	6	8,0.9	..	..	1	7/1	2	142.00
Stanford University Hospitals* [1]	San Francisco	O. E. L. Schmidt	26	11,074	..	..	1	7/1	1	50.00
University of California Hospital* [1]	San Francisco	.....	28	8,357	1	1	3	7/1, 8/1, 9/1	3	50.00
University of Colorado Medical Center, Colorado General Hosp.tal* [1]	Denver	O. S. Philpott	42	4,837	..	..	2	7/1	1	75.00
Georgetown University Hospital*	Washington, D. C.		(Included in Medicine)				2	7	2	25.00
†Alto Medical Center [22]	Alto, Ga.	E. M. Christensen	14,325	.....	3	1	1	.....	1	.....
†Chicago Intensive Treatment Center [22]	Chicago	.....	.....	.....	..	..	1	.....	1	.....
†Cook County Hospital* [1]	Chicago	T. Cornbleet	199	10,479	47	..	2	1, 7	2	32.00
Michael Reese Hospital* [1]	Chicago	E. P. Lieberthal	19	6,356	..	..	1	1/1, 7	1	25.00
Northwestern University Medical Center	Chicago	.....	.....	.....	..	..	1	.....	3	.....
Research and Educational Hospitals* [1]	Chicago	F. E. Senear	53	11,911	..	..	1	7/1	3	55.00
University of Chicago Clinics* [1]	Chicago	S. Rothman	122	4,530	2	2	7	7/1	3	35.00
†Indianapolis General Hospital*	Indianapolis	J. R. Brayton	119	7,237	1	0	3	7/1	3	80.00
University Hospitals* [1]	Iowa City	R. Nomland	366	3,669	3	0	3	7/1	3	50.00
University of Kansas Medical Center*	Kansas City, Kan.	C. C. Dennie	91	1,500	2	1	1	.....	1	.....
†Louisville General Hospital*	Louisville, Ky.	W. U. Rutledge	.....	5,280	..	..	1	7/1	1	100.00
Charity Hospital of Louisiana* [1]	New Orleans		353	38,119	2	0	6	7/1	3	25.00
†Johns Hopkins Hospital* [22]	Baltimore		.....	28,417	..	..	3	7/1	1	41.66
†University Hospital* [1]	Baltimore	H. M. Robinson, Sr.	.....	23,905	..	..	1	.....	2	.....
Boston City Hospital* [1]	Boston	J. G. Downing	84	18,522	1	0	5	.....	2	.....
Massachusetts General Hospital*	Boston	N. Fraser	478	.....	4	2	5	.....	3	.....
Massachusetts Memorial Hospitals* [1]	Boston	J. G. Downing	.....	2,261	..	..	..	.....	..	.....
		W. L. Fleming	.....	11,557	..	..	1	9/15	1	50.00
University Hospitals* [1]	Ann Arbor, Mich.	A. C. Curtis	629	10,882	8	4	6	7/1	3	118.80
City of Detroit Receiving Hospitals* [1]	Detroit	L. W. Shaffer	24	6,726	..	..	6	7/1	3	.....
Minneapolis General Hospitals* [1]	Minneapolis	C. W. Laymon	331	7,558	3	3	2	1/1, 7/1	3	115.00
University of Minnesota Hospitals* [1]	Minneapolis	H. Michaelson	131	5,025	4	3	1	.....	3	.....
Mayo Foundation	Rochester, Minn.	P. A. O'Leary	.....	.....	..	..	12	.....	3	92.50
Ancker Hospital*	St. Paul	J. F. Madden	279	3,090	3	2	2	.....	3	.....
Barnard Free Skin and Cancer Hospital	St. Louis	R. S. Weiss	46	12,434	0	..	7	7/1	3	110.00
†Barnes Hospital*	St. Louis		(Included in Internal Medicine)						2	.....
†St. Mary's Group of Hospitals* [1]	St. Louis	G. Y. Stryker	152	7,473	..	..	2	7/1	3	35.00
Kings County Hospital* [1]	Brooklyn	L. J. Frank	1,023	17,356	21	5	2	7/1	1	80.00
Buffalo General Hospital*	Buffalo	E. Osborne	.....	3,478	..	..	2	7/1	2	50.00
Edward J. Meyer Memorial Hospital* [1]	Buffalo	E. D. Osborne	484	11,621	2	1	3	7/1	3	100.00
Bellevue Hospital, Div.—N. Y. Univ.* [1]	New York City	C. L. Combes	3,162	18,886	20	1	5	1, 7	3	60.00
Columbia-Presbyterian Medical Center [1]	New York City	A. B. Cannon	8	39,502	1	..	2	.....	3	75.00
†Hospital for Joint Diseases* [1]	New York City	P. Gross	7	6,072	..	..	1	1/1	1	40.00
†Mount Sinai Hospital* [1]	New York City	S. M. Peck	.....	.....	..	..	1	.....	2	50.00
New York City Hospital* [1]	New York City	A. B. Cannon	691	8,736	4	..	3	7/1	3	100.00
New York Hospital*	New York City	Barr and Webster	.....	22,919	(Included in Med.)				3	.....
†New York Polyclinic Medical School and Hosp.*	New York City		25	7,259	1	..	1	.....	1	.....
†Roosevelt Hospital* [1]	New York City	G. C. Andrews	.....	9,560	..	..	1	7/1	1	108.33
St. Luke's Hospital*	New York City	L. P. Barker	126	11,469	..	..	1	1/1	2	50.00
University Hospital*	New York City	M. B. Sulzberger	124	106,977	5	2	5	2/1, 10/1	3	.....
Duke Hospital* [1]	Durham, N. C.	J. L. Callaway	261	2,679	1	..	4	7/1	3	83.33
Eastern Medical Center [22]	Durham, N. C.	R. B. Hogan	.....	.....	..	..	..	.....	1	.....
Cincinnati General Hospital* [1]	Cincinnati	L. Goldman	337	6,309	9	2	7	7/1	3	.....
City Hospital* [1]	Cleveland	H. N. Cole	847	15,266	4	1	3	7/1	3	60.00
Cleveland Clinic Hospital [1]	Cleveland	F. W. Netherton	180	21,029	3	1	3	7/1	3	100.00
University Hospitals* [1]	Cleveland	H. N. Cole	294	16,019	1	..	3	7/1	3	25.00
University of Oregon Medical School Hospitals and Clinics* [1]	Portland, Ore.	L. B. Kingery	68	5,956	..	..	2	7/1	2	75.00
Graduate Hosp. of the Univ. of Pennsylvania*	Philadelphia		82	6,085	1	..	3	7/1	2	.....
Hospital of the University of Pennsylvania* [1]	Philadelphia	D. M. Pillsbury	650	21,831	..	..	22	7/1	3	.....
Jefferson Medical College Hospital*	Philadelphia	C. S. Livingood	16	4,894	..	..	2	7/1	2	.....
†Pennsylvania Hospital*	Philadelphia	H. Beerman	.....	9,694	..	..	1	.....	1	20.00
Skin and Cancer Hospital	Philadelphia	D. M. Pillsbury and C. S. Wright	366	51,177	6	1	4	Varies	2	50.00
University of Pittsburgh Medical Center	Pittsburgh	.....	.....	.....	..	..	1	.....	3	.....
†Parkland Hospital* [1]	Dallas, Texas	.....	.....	.....	..	..	6	.....	1	.....
University of Texas Medical Branch Hosps.* [1]	Galveston, Texas	G. Holmes	118	8,003	1	1	7	.....	3	.....
University of Virginia Hospital* [1]	Charlottesville, Va.	D. C. Smith	209	12,516	4	..	6	7/1	3	62.00
†State of Wisconsin General Hospital* [1]	Madison, Wis.	S. A. M. Johnson	254	3,515	2	1	1	9	1	25.00

Numerical and other references will be found on page 225.

6. GASTROENTEROLOGY

The following services are approved by the Council and the American Board of Internal Medicine
Hospitals, 3; Assistant Residencies and Residencies, 3

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
†Michael Reese Hospital*	Chicago	H. Necheles	.....	.....	..	..	1	1/1, 7/1	.....
†Lenox Hill Hospital*[1]	New York City	H. A. Rafsky	186	.....	9	3	1	7/1	$50.00
†Hospital of the University of Pennsylvania*[1]	Philadelphia	T. G. Miller	.....	3,317	..	..	1	7/1	.....

7. GENERAL RESIDENCY

The listing of hospitals under this category will be discontinued following publication of the 1949 Internship and Residency Number. Hospitals previously approved under this classification and desiring continued approval will be expected to meet the requirements for residency training in general practice.

Hospitals, 85; Assistant Residencies and Residencies, 216

Name of Hospital	Location	Chief of Staff	Inpatients Treated	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
Baptist Hospitals[1]	Birmingham, Ala.	H. Linder	8,434	183	69	4	7/1	$200.00
St. Vincent's Hospital[1]	Birmingham, Ala.	R. G. Lovelady	5,524	115	43	3	1/1, 1/2	.....
St. Margaret's Hospital[1]	Montgomery, Ala.	J. Blue	6,328	171	51	1	.....	.....
Pima County General Hospital[1]	Tucson, Ariz.	H. C. Thompson	2,309	189	76	3	7/1	220.00
Leo N. Levi Memorial Hospital[1]	Hot Springs, Ark.	D. C. Lee	1,461	49	19	1	.....	.....
Kern General Hospital[1]	Bakersfield, Calif.	J. K. Coker	11,282	..	..	25	7/1	.....
Paradise Valley Sanitarium and Hospital	National City, Calif.	S. G. Peck	3,076	100	23	..	.....	.....
Monterey County Hospital[1]	Salinas, Calif.	J. C. Sharp	2,910	187	108	6	7/1	215.00
St. Francis Hospital[1]	San Francisco	L. R. Reynolds	12,280	339	45	7	.....	.....
St. Helena Sanitarium and Hospital[1]	Sanitarium, Calif.	.....	3,575	65	26	2	.....	.....
Community Hospital of San Mateo County[1]	San Mateo, Calif.	S. Lindsay	2,788	215	65	4	7/1	200.00
Sonoma County Hospital	Santa Rosa, Calif.	P. T. Quarry	3,383	88	..	8	7/1	250.00
Boulder-Colorado Sanitarium and Hospital	Boulder, Colo.	R. H. Hanson	2,520	48	9	1	.....	.....
Memorial Hospital[1]	Colorado Spgs., Colo.	H. H. Lamberson	3,718	104	20	1	7/1	210.00
St. Francis Hospital and Sanatorium[1]	Colorado Spgs., Colo.	H. C. Bryan	3,625	139	56	2	1/1, 7/1	.....
University of Colorado Medical Center[1]	Denver	W. Darley and G. D. Ellis	15,498	1,163	605	20	7/1	.....
St. Mary Hospital	Pueblo, Colo.	L. L. Ward	4,198	158	22	..	.....	.....
Bristol Hospital	Bristol, Conn.	R. A. Richardson	5,012	144	36	2	3/1	150.00
Greenwich Hospital[1]	Greenwich, Conn.	J. Miller	4,077	123	87	4	7/1	200.00
Eastern Dispensary and Casualty Hospital	Washington, D. C.	J. R. Young	3,784	148	21	3	7	250.00
Riverside Hospital[1]	Jacksonville, Fla.	T. Z. Cason	1,910	39	20	..	7, 9	.....
Alton Memorial Hospital	Alton, Ill.	.....	6,257	99	38	1	7/1	200.00
St. Joseph's Hospital	Alton, Ill.	L. Konzen	6,128	177	81	3	7/1	150.00
St. Francis Hospital	Blue Island, Ill.	F. Vincenti	4,538	124	35	3	7	225.00
St. James Hospital	Chicago Heights, Ill.	H. Long	4,632	133	49	2	.....	.....
St. Anthony's Hospital	Rock Island, Ill.	H. P. Miller	4,880	245	39	..	.....	.....
St. Francis Hospital	Beech Grove, Ind.	C. A. Reid	6,167	135	37	2	.....	250.00
Clinic Hospital[1]	Bluffton, Ind.	T. E. Taylor	2,221	60	37	3	8/30, 7/6	100.00
Lafayette Home Hospital[1]	Lafayette, Ind.	W. W. Washburn	4,644	104	29	2	.....	.....
St. Luke's Methodist Hospital[1]	Cedar Rapids, Iowa	R. D. Proctor	9,209	211	67	3	6/1	200.00
Jewish Hospital	Louisville, Ky.	L. W. Frank	3,270	143	40	1	.....	.....
E. A. Conway Memorial Hospital[1]	Monroe, La.	A. G. McHenry	7,744	273	17	6	1/1, 7/1	275.00
Long Island Hospital	Boston	R. I. Smith	806	108	..	11	.....	200.00
St. Anne's Hospital	Fall River, Mass.	E. E. Hussey	3,673	88	31	1	7/1	150.00
Framingham Union Hospital	Framingham, Mass.	T. J. Carnicelli	5,020	86	32	..	.....	.....
Malden Hospital	Malden, Mass.	.....	6,344	181	95	..	.....	.....
Cooley Dickinson Hospital[1]	Northampton, Mass.	J. R. Hobbs	5,279	202	77	..	.....	.....
Tewksbury State Hospital and Infirmary	Tewksbury, Mass.	.....	1,504	322	35	..	.....	.....
Parkside Hospital	Detroit	J. L. Graham	1,528	51	6	1	7/1	.....
Saratoga General Hospital	Detroit	E. L. Sager	4,904	86	21	3	6	200.00
Cottage Hospital[1]	Grosse Pointe, Mich.	W. G. Bernard	2,685	47	13	..	.....	.....
Mercy Hospital[1]	Muskegon, Mich.	E. M. Scebesta	4,580	149	41	..	.....	.....
St. Joseph Mercy Hospital[1]	Pontiac, Mich.	E. E. Hammonds	3,163	182	66	4	.....	.....
Wyandotte General Hospital[1]	Wyandotte, Mich.	D. R. Herklmer	8,327	257	76	..	.....	.....
Hibbing General Hospital	Hibbing, Minn.	C. N. Harris	5,033	124	101	1	7/1	200.00
Eitel Hospital[1]	Minneapolis	W. I. Nelson	4,544	141	57	2	1, 7	100.00
Fairview Hospital[1]	Minneapolis	N. Winther	7,540	230	88	2	7/1, 11/1	200.00
Midway Hospital	St. Paul	O. Earl	3,548	135	59	3	7	300.00
Northern Pacific Beneficial Assn. Hospital	St. Paul	B. I. Derauf	3,008	108	16	..	.....	.....
Alexian Brothers Hospital	St. Louis	W. Weinsberg	2,905	150	55	2	7	200.00
Missouri Pacific Hospital	St. Louis	O. B. Zeinert	7,546	196	70	12	7/1	125.00
Douglas County Hospital	Omaha	T. Boler	6,379	454	..	..	.....	.....
Elliot Hospital[1]	Manchester, N. H.	G. F. Dwinell	3,554	83	53	3	4/1	75.00
Sacred Heart Hospital	Manchester, N. H.	J. J. Powers	6,491	173	39	1	6/17	200.00
Irvington General Hospital	Irvington, N. J.	M. F. Baker	3,678	190	38	3	7/1	225.00
Jewish Sanitarium and Hospital for Chronic Diseases[1]	Brooklyn	A. M. Rabiner	178	108	98	5	Varies	150.00
St. Joseph Hospital	Far Rockaway, N. Y.	M. Morris	3,739	85	13	..	.....	.....
Cornell University Infirmary	Ithaca, N. Y.	N. S. Moore	1,696	1	1	..	.....	.....
Kingston Hospital	Kingston, N. Y.	.....	3,957	179	27	2	7/1	150.00
Beekman-Downtown Hospital[1]	New York City	R. Spillman	1,708	160	40	3	1, 7	100.00
Richmond Memorial Hospital[1]	Staten Island, N. Y.	R. Klauber	5,496	114	36	2	9/1	200.00
Wyoming County Community Hospital	Warsaw, N. Y.	H. S. Martin	3,175	105	37	2	7/1	75.00
Mercy Hospital	Charlotte, N. C.	G. Black	7,643	179	22	..	.....	.....
Highsmith Hospital[1]	Fayetteville, N. C.	N. T. Rainey	5,184	170	5	1	7/1	125.00
Park View Hospital	Rocky Mount, N. C.	E. S. Boice	3,578	150	3	..	.....	.....
Grace Hospital	Cleveland	A. E. Biddinger	2,498	43	10	2	.....	300.00
Mansfield General Hospital	Mansfield, Ohio	W. M. Brown	7,250	240	29	2	7	100.00
Madison Rural Sanitarium and Hospital	Madison Coll., Tenn.	J. C. Gant	3,844	66	10	..	7/1	.....
Medical Arts Hospital	Dallas, Texas	M. D. Bell	4,865	82	13	1	.....	200.00
All Saints Hospital[1]	Fort Worth, Texas	O. C. Garrett	5,567	143	50	3	7/1	150.00
St. Mary's Infirmary	Galveston, Texas	E. Klatt	5,686	186	132	3	.....	.....
Kings Daughters Hospital[1]	Portsmouth, Va.	J. D. Collins	5,870	225	49	3	.....	250.00

Numerical and other references will be found on page 225.

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7. GENERAL RESIDENCY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated *	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
Maryview Hospital	Portsmouth, Va.	R. M. Cox	3,747	153	65	1	.....	.....
Grace Hospital	Richmond, Va.	A. L. Herring	4,671	86	7	2	.....	$150.00
Retreat for the Sick	Richmond, Va.	R. F. Simms	4,593	104	51	..	.....	.....
St. Elizabeth's Hospital [1]	Richmond, Va.	G. W. Horsley	2,058	26	16	1	7/1	100.00
St. Luke's Hospital	Richmond, Va.	R. Nassie	3,776	85	32	..	.....	.....
Sheltering Arms Hospital [1]	Richmond, Va.	C. M. Nelson	1,824	62	35	2	.....	.....
Maynard Hospital	Seattle	F. Burg	3,994	91	46	2	7	175.00
St. Joseph Hospital	Vancouver, Wash.	C. B. Hutt	5,285	97	48	1	.....	150.00
McMillan Hospital	Charleston, W. Va.	J. Seltzer	4,180	36	8	2	.....	200.00
St. Francis Hospital [1]	Charleston, W. Va.	R. R. Louft	6,663	124	26	3	5, 8	200.00
St. Mary's Hospital	Clarksburg, W. Va.	C. O. Post	6,890	132	14	..	.....	.....
Fairmont General Hospital	Fairmont, W. Va.	R. H. Jones	6,418	99	37	..	.....	.....
St. Mary's Hospital	Superior, Wis.	C. W. Giesen	3,031	230	49	..	.....	.....

8. INTERNAL MEDICINE

The following services are approved by the Council and the American Board of Internal Medicine Hospitals, 504; Assistant Residencies and Residencies, 3,313

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
United States Army									
Letterman General Hospital*	San Francisco	J. O. Gillespie	3,515	1,617	79	61	10	.....	n
Fitzsimons General Hospital*	Denver	M. M. Green	2,316	278	12	4	13	.....	n
Walter Reed General Hospital*	Washington, D. C.	C. R. Mueller	1,718	19,007	88	79	18	1, 7	n
Oliver General Hospital*	Augusta, Ga.	C. L. Leedham	3,512	713	6	4	9	1/1, 7/1	n
Brooke General Hospital*	San Antonio, Tex.	J. G. Knauer	6,835	15,423	140	101	22	.....	n
Gorgas Hosp.tal*	Ancon, C. Z.	.....	6,1.9	24,186	284	139	5	1/1	n
Tripler General Hospital*	Moanalua, T. H.	.....	1,6.2	.....	2	1	..	7/1	n
United States Navy									
U. S. Naval Hospital*	Long Beach, Calif.	C. L. Andrews	4,327	.....	171	141	5	Varies	n
U. S. Naval Hospital*	Oakland, Calif.	A. R. Higgins	.....	.....	...	...	6	7	n
U. S. Naval Hospital*	San Diego, Calif.	E. F. Evans	3,706	15,018	174	118	7	.....	n
U. S. Naval Hospital*	Great Lakes, Ill.	H. H. Carroll	3,317	4,286	13	11	3	Varies	n
U. S. Naval Hospital*	Bethesda, Md.	L. L. Norman	5,428	23	29	16	11	Varies	n
†U. S. Naval Hospital*	Chelsea, Mass.	J. H. L. Heinzelman	.....	.....	...	...	1	.....	n
†U. S. Naval Hospital*	St. Albans, N. Y.	H. L. Weaver	2,560	248	75	54	4	.....	n
U. S. Naval Hospital*	Philadelphia	J. Love	8,941	3,442	351	196	8	.....	n
United States Public Health Service									
U. S. Marine Hospital*	Chicago	E. E. Mandel	.....	.....	...	...	2	.....	n
U. S. Marine Hospital* [1]	New Orleans, La.	A. A. Doerner	3,140	32,968	92	60	4	7/1	n
Federal Security Agency									
Freedmen's Hospital* [1]	Washington, D. C.	R. K. Brown	858	4,910	184	62	7	7/1	n
Veterans Administration									
†Veterans Admin. Hospital	Tuskegee, Ala.	.....	.....	.....	...	...	..	.....[2]	n
Veterans Admin. Center [1]	Los Angeles	R. O. Egeberg	5,089	111,287	173	104	45	.....	n
†Veterans Admin. Hospital	Oakland, Calif.	E. R. Mevitt	2,400	8,113	153	111	13	7/1	n
Veterans Admin. Hospital [1]	San Francisco	G. E. Hein	1,542	4,347	89	71	20	7/1	n
Veterans Admin. Hospital	Van Nuys, Calif.	F. W. S. Modern	1,313	18,725	123	106	41	1/1, 7/1	n
Veterans Admin. Hospital	Fort Logan, Colo.	T. P. Sears	1,596	0	32	31	16	.....	n
Veterans Admin. Hospital	Newington, Conn.	P. Kunkel	1,819	.....	75	48	18	7/1	n
†Veterans Admin. Hospital	Washington, D. C.	L. K. Alpert	438	2,345	37	73	13	7/1	n
Veterans Admin. Hospital	Coral Gables, Fla.	J. M. Rumball	1,201	7,566	52	48	5	7/1	n
†Veterans Admin. Hospital	Augusta, Ga.	J. R. Kaufman	.....	.....	...	...	3	.....	n
Veterans Admin. Hospital	Chamblee, Ga.	M. Michael, Jr.	3,039	104	114	80	18	7/1	n
Veterans Admin. Hospital	Hines, Ill.	L. A. Baker	7,804	.....	276	135	53	1/2, 7/1	n
†Veterans Admin. Hospital	Indianapolis	R. E. Westmoreland	3,218	.....	128	96	11	1/7	n
Veterans Admin. Hospital	Des Moines, Iowa	D. J. Glomset	3,221	0	159	96	15	7	n
Veterans Admin. Hospital	Topeka, Kan.	R. Chess	1,533	.....	41	35	7	7/1	n
Veterans Admin. Center [1]	Wadsworth, Kan.	M. Slavin	5,327	25	272	230	12	1, 7	n
Veterans Admin. Hospital	Wichita, Kan.	.....	.....	.....	...	...	...	.....	n
†Veterans Admin. Hospital [1]	Louisville, Ky.	J. R. Gott, Jr.	4,471	3,069	...	...	35	.....	n
Veterans Admin. Hospital [1]	New Orleans, La.	C. A. Jones	1,427	2,237	64	56	16	7/1	n
†Veterans Admin. Hospital	Fort Howard, Md.	P. Padget	2,102	2,086	180	116	11	Varies	n
Veterans Admin. Hospital	Perry Pt., Md.	S. Goldgraben	639	100	13	7	2	7	n
Veterans Admin. Hospital (West Roxbury) [1]	Boston	T. A. Warthin	3,008	2,100	115	88	15	7/1	n
Veterans Admin. Hospital [1]	Framingham, Mass.	.....	2,305	.....	142	80	23	7/1	n
Veterans Admin. Hospital	Dearborn, Mich.	H. J. Kullman	3,033	9,418	203	130	21	7/1	n
Veterans Admin. Hospital	Minneapolis	.....	3,397	.....	208	138	31	.....	n
†Veterans Admin. Hospital [1]	Jefferson Bks., Mo.	.....	1,230	.....	82	47	24	.....	n
Veterans Admin. Hospital	Albuquerque, N. M.	.....	501	.....	20	17	6	7/1	n
†Veterans Admin. Hospital	Batavia, N. Y.	J. M. Ruegsegger	1,780	380	92	40	9	7/1	n
†Veterans Admin. Hospital	Bath, N. Y.	A. S. Dowling	1,557	26,634	109	11	4	1, 7	n
Veterans Admin. Hospital	New York City	B. Straus	4,779	894	378	196	30	7/1	n
†Veterans Admin. Hospital [1]	Staten Island, N. Y.	H. A. Welner	1,014	10,800	48	39	22	7/1	n
†Veterans Admin. Hospital [1]	Cleveland	N. F. Shumway	3,626	.....	222	128	27	3/1, 7/1, 11/1	n
Veterans Admin. Center	Dayton, Ohio	T. Jarrold	205	.....	8	5	24	.....	n
†Veterans Admin. Hospital [1]	Oklahoma City	W. Langston	1,532	.....	45	17	6	7	n
Veterans Admin. Hospital	Portland, Ore.	J. H. Mills	3,397	.....	165	112	15	1/1, 7/1	n
Veterans Admin. Hospital	Aspinwall, Pa.	R. Schwartz	3,686	.....	280	167	19	7/1	n
Veterans Admin. Hospital	Columbia, S. C.	S. L. Zimmerman	3,293	.....	162	92	7	7	n
†Veterans Admin. Hospital [1]	Memphis, Tenn.	J. E. Cottrell	1,709	18,494	42	98	22	7/1	n
†Veterans Admin. Hospital	Nashville, Tenn.	R. France	2,822	.....	50	32	12	7/1	n

Numerical and other references will be found on page 225.

8. INTERNAL MEDICINE—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [6]	Beginning of Service (1949)	Beginning Stipend (Month)
Veterans Admin. Hospital [1]	Dallas, Texas	C. W. Sensenbach	423	.....	33	21	13	1/1, 7/1	n
Veterans Admin. Hospital [1]	McKinney, Texas	B. Friedman	....	.....	...	...	17	.....	n
Veterans Admin. Hospital	Salt Lake City	J. C. Nunemaker	3,129	3,933	90	82	11	7	n
Veterans Admin. Center [1]	White River Jct., Vt.	A. Yeomans	1,849	127	63	53	8	7/1	n
†Veterans Admin. Hospital [1]	Richmond, Va.	J. P. Williams	5,286	.....	144	86	26	7/1	n
Veterans Admin. Hospital [1]	Milwaukee	M. W. Garry	3,780	4,032	240	156	26	7/1	n
Nonfederal									
Jefferson-Hillman Hospital*[1]	Birmingham, Ala.	J. S. McLester	3,856	13,540	400	143	10	.....	.....
Carraway Methodist Hospital*	Birmingham, Ala.	E. D. Lineberry	1,473	4,742	36	8	2	7/1	$100.00
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company*	Fairfield, Ala.	G. M. Hankins	2,117	26,179	136	58	7	7/1	225.00
St. Joseph's Hospital*	Phoenix, Ariz.	R. S. Flinn	1,772	0	87	44	1	.....	.....
†St. Monica's Hospital and Health Center*	Phoenix, Ariz.	R. S. Flinn	1,351	.....	116	51	1	7/1	200.00
†St. Mary's Hospital and Sanatorium*	Tucson, Ariz.	H. W. Kohl	2,763	462	99	28	1	7/1	175.00
†Tucson Medical Center*	Tucson, Ariz.	W. Hewitt	901	307	52	22	2	7/1	225.00
Arkansas Baptist Hospital*	Little Rock, Ark.	S. T. W. Cull	2,584	.....	238	54	2	7/1	75.00
†University Hospital*	Little Rock, Ark.	J. N. Compton	630	6,313	71	38	6	7/1	50.00
San Joaquin General Hospital*	French Camp, Calif.	G. K. Wever	4,202	.....	455	272	4	7/1	210.00
General Hospital of Fresno County*[1]	Fresno, Calif.	H. A. Randel	1,362	.....	326	100	2	.....	231.00
Glendale Sanitarium and Hospital*	Glendale, Calif.	H. J. Hoxie	3,314	.....	198	74	4	7/1	160.00
Seaside Memorial Hospital*	Long Beach, Calif.	F. Kellogg	3,539	.....	272	60	2	7	150.00
California Hospital*[1]	Los Angeles	W. F. Wessels	2,904	12,537	230	106	3	7/1	100.00
Cedars of Lebanon Hospital*[1]	Los Angeles	.....	2,778	12,423	287	104	2	.....	50.00
Hospital of the Good Samaritan*[1]	Los Angeles	E. R. Ware	2,297	8,950	221	91	3	7/1	150.00
Los Angeles County Hospital*[1]	Los Angeles	D. W. Griggs	19,925	51,170	2,588	876	35	Varies	165.00
Queen of Angels Hospital*	Los Angeles	.....	2,061	709	...	84	2	.....	.....
St. Vincent's Hospital*	Los Angeles	J. C Ruddock	5,736	.....	54	33	1	.....	.....
White Memorial Hospital*	Los Angeles	W. E. Macpherson	1,364	28,347	85	55	5	7/1	142.00
Highland-Alameda County Hospital*[1]	Oakland, Calif.	H. Rogers	2,765	.....	496	205	2	.....	100.00
Permanente Foundation Hospital*[1]	Oakland, Calif.	M. F. Collen	1,813	33,141	116	39	2	.....	.....
Samuel Merritt Hospital	Oakland, Calif.	F. Taylor	1,029	.....	...	...	2	1/18	110.00
Collis P. and Howard Huntington Memorial Hospital*	Pasadena, Calif.	.....	1,714	.....	179	104	2	7/1	.....
Mercy Hospital*	San Diego, Calif.	.....	.....	.....	...	...	..	.....	.....
San Diego County General Hospital*	San Diego, Calif.	J. M. Rumsey	2,755	9,895	498	190	5	7/1	125.00
Children's Hospital*[1]	San Francisco	D. Atkinson	370	1,785	21	9	1	7/1	50.00
Franklin Hospital*[1]	San Francisco	H. C. Shepardson	1,504	.....	130	48	3	7/1	100.00
French Hospital*[1]	San Francisco	D. L. Wilbur	1,060	.....	173	55	2	7	105.00
Mary's Help Hospital*	San Francisco	.....	.....	.....	...	...	..	.....	.....
Mount Zion Hospital*[1]	San Francisco	A. L. Cohn and J. J. Sampson	1,340	6,885	130	86	5	.....	80.00
St. Luke's Hospital*[1]	San Francisco	E. L. Bruck	2,088	2,778	175	65	2	7/1	100.00
St. Mary's Hospital*	San Francisco	J. J. McGinnis	.....	.....	...	...	2	7/1	100.00
San Francisco Hospital*[1]	San Francisco	L. H. Briggs	4,208	.....	946	183	6	.....	175.00
Southern Pacific General Hospital	San Francisco	.....	.....	.....	...	...	2	.....	.....
Stanford University Hospitals*[1]	San Francisco	A. L. Bloomfield	2,210	23,382	120	65	15	7/1	50.00
University of California Hospitals*[1,51]	San Francisco	W. J. Kerr	1,549	34,436	74	58	8	7/1, 8/1, 9/1	50.00
Santa Clara County Hospital*	San Jose, Calif.	P. Morton	3,216	.....	227	95	3	7/1	235.00
Fairmont Hospital of Alameda County [1]	San Leandro, Calif.	H. Rogers	1,610	7,503	348	129	5	7/1	145.00
Santa Barbara Cottage Hospital*[1]	Santa Barbara, Calif.	D. H. McNamara	2,817	.....	90	56	3	7/1	100.00
†Harbor General Hospital [1]	Torrance, Calif.	D. Root	1,668	.....	355	107	6	7/1	.....
University of Colorado Medical Center, Colorado General Hospital*[1]	Denver	R. S. Liggett	1,171	30,361	205	153	17	.....	.....
Denver General Hospital*[1,28]	Denver	S. S. Kauvar	3,053	.....	528	253	3	7	40.00
St. Joseph Hospital*	Denver	.....	1,688	.....	86	39	1	7/1	85.00
Colorado State Hospital [1]	Pueblo, Colo.	S. C. Werch	.....	.....	...	...	2	.....	275.00
Corwin Hospital*	Pueblo, Colo.	R. H. Finney	2,215	38,016	124	120	1	7/1	75.00
Bridgeport Hospital*	Bridgeport, Conn.	.....	.....	.....	...	...	..	.....	.....
Hartford Hospital*[1]	Hartford, Conn.	G. G. Russell	3,383	6,700	337	184	6	7/1	50.00
New Britain General Hospital*	New Britain, Conn.	J. C. White	1,351	.....	179	70	2	7/1	75.00
Grace-New Haven Community Hospital, Grace Unit*	New Haven, Conn.	T. Evans	1,146	.....	118	17	3	7/1	52.00
New Haven Unit (University Service)*[1]	New Haven, Conn.	F. G. Blake	2,216	23,758	317	166	12	7/1	40.00
†Hospital of St. Raphael*	New Haven, Conn.	T. S. Evans and J. Mignone	.....	.....	...	...	3	.....	75.00
†Lawrence and Memorial Associated Hospitals*[1]	New London, Conn.	A. Labensky	1,654	.....	181	37	2	7/1	125.00
Norwalk Hospital*	Norwalk, Conn.	D. L. Ellrich	1,498	.....	118	37	2	7/1	155.00
†Waterbury Hospital*[1]	Waterbury, Conn.	O. J. Bizzozero	4,571	3,936	210	93	2	7/1	100.00
Delaware Hospital*	Wilmington, Del.	L. B. Flinn	2,169	4,654	214	88	4	7/1	60.00
Memorial Hospital*	Wilmington, Del.	L. B. Flinn	1,867	976	32	23	3	7/1, 8/1	110.00
†Wilmington General Hospital	Wilmington, Del.	J. R. Durham, Jr.	1,466	975	85	37	..	.....	150.00
Central Dispensary and Emergency Hospital*[1]	Washington, D. C.	.....	1,584	5,550	151	73	1	7/1	100.00
Doctors Hospital*	Washington, D. C.	A. McNitt	2,117	.....	139	93	3	.....	.....
Gallinger Municipal Hospital*[1]	Washington, D. C.	.....	2,950	920	546	241	14	7/1	100.00
Garfield Memorial Hospital*[1]	Washington, D. C.	B. F. Weems	1,581	3,234	130	64	5	.....	.....
Georgetown University Hospital*[1]	Washington, D. C.	H. Jeghers	2,085	.....	159	74	17	7	25.00
George Washington University Hospital*	Washington, D. C.	T. McP. Brown	410	2,222	10	6	4	7/1	50.00
†Providence Hospital*[1]	Washington, D. C.	H. R Schreiber and W. P. Argy	1,943	3,755	206	112	4	7/1	75.00
Duval Medical Center*[1]	Jacksonville, Fla.	L. Limbaugh	757	.....	185	100	3	7/1	125.00
Riverside Hospital [1]	Jacksonville, Fla.	.....	.....	.....	...	...	1	7/1	.....
Jackson Memorial Hospital*	Miami, Fla.	J. H. Putman	5,315	9,453	634	244	7	7/1	60.00
Crawford W. Long Memorial Hospital*[1]	Atlanta, Ga.	W. R. Crowe	1,949	720	151	39	4	7/1	75.00
Grady Memorial Hospital*[1]	Atlanta, Ga.	P. B. Beeson	2,163	85,414	426	322	12	7/1	.....
Piedmont Hospital*[1]	Atlanta, Ga.	.....	947	.....	45	38	2	7/1	75.00
St. Joseph's Infirmary*	Atlanta, Ga.	M. I. Lowance	2,255	1,264	73	22	2	7/1	100.00
University Hospital*[1]	Augusta, Ga.	V. P. Sydenstricker	2,273	.....	261	36	7	7	40.00
Emory University Hospital*[1]	Emory University, Ga.	D. F. James	2,060	.....	131	78	3	7/1	50.00
†Alexian Brothers Hospital*	Chicago	.....	1,896	.....	135	72	2	7/1	100.00
†American Hospital*[1]	Chicago	A. Afremow	.....	.....	...	...	1	1/1	50.00
†Augustana Hospital*	Chicago	C. A. Hedberg	2,457	2,012	176	97	6	7/1	50.00
Cook County Hospital*[1]	Chicago	E. F. Foley	18,123	18,705	4,315	...	37	1, 7	82.00
Grant Hospital*[1]	Chicago	A. Vander Kloot	1,365	4,513	121	66	2	7/1	145.00
†Henrotin Hospital*[1]	Chicago	F. K. Hick	975	.....	52	19	1	.....	100.00

Numerical and other references will be found on page 225.

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8. INTERNAL MEDICINE—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Beginning Stipend (Month)
Hospital of St. Anthony de Padua*	Chicago	F. L. Foran	1,931	.....	120	38	1	1/1	$150.00
†Illinois Central Hospital[1]	Chicago	L. H. Sloan	1,055	.....	34	9	1	1/1	150.00
Illinois Masonic Hospital[1]	Chicago	Hayes	1,926	.....	233	142	2	.....	.....
Lutheran Deaconess Home and Hospital[1]	Chicago	.....	1,944	.....	147	48	1	1/1	100.00
Mercy Hospital-Loyola University Clinics*	Chicago	G. F. O'Brien	2,338	19,893	146	47	5	.....	25.00
Michael Reese Hospital[1,5,6]	Chicago	J. Golden	5,245	27,827	...	...	6	1/1, 7	25.00
Mount Sinai Hospital[1]	Chicago	I. A. Rabens	1,920	20,964	198	64	3	1, 7	66.67
Norwegian-American Hospital[1]	Chicago	M. P. Getzner	2,388	.....	155	54	1	7	150.00
Passavant Memorial Hospital[1]	Chicago	W. H. Nadler	1,339	1,586	65	39	5	1/1, 7/1	0
Presbyterian Hospital*	Chicago	S. H. Armstrong, Jr.	3,537	18,817	179	101	9	.....	25.00
Provident Hospital[1]	Chicago	A. F. Connor	730	5,745	98	31	2	7/1	50.00
†Ravenswood Hospital[1]	Chicago	E. W. Shaffer	1,325	215	114	80	3	7/1	6.00
Research and Educational Hospitals[1]	Chicago	R. W. Keeton	615	14,285	...	...	5	7/1	55.00
†St. Anne's Hospital*	Chicago	S. G. Plice	1,513	.....	119	11	2	1, 10	125.00
†St. Elizabeth Hospital*	Chicago	A. E. Luckhardt	2,617	.....	...	1	1	7/1	60.00
St. Joseph Hospital*	Chicago	L. E. Hines	1,423	1,642	116	64	2	7, 4	75.00
St. Luke's Hospital*	Chicago	G. W. Southam	3,076	6,989	230	152	8	7/1	25.00
University of Chicago Clinics*	Chicago	L. T. Coggeshall	2,249	23,172	166	83	20	7/1	25.00
Wesley Memorial Hospital[1]	Chicago	P. S. Rhoads	3,529	.....	160	92	10	.....	25.00
Woodlawn Hospital[1]	Chicago	W. E. Gouwens	1,103	410	40	28	1	7/1	150.00
Evanston Hospital*	Evanston, Ill.	L. D. Snorf	2,363	9,168	146	121	6	.....	50.00
St. Francis Hospital*	Evanston, Ill.	J. T. Paul	2,778	.....	201	74	4	7/1	75.00
†West Suburban Hospital*	Oak Park, Ill.	.....	1,294	1,281	183	76	1	7	150.00
St. Francis Hospital[1]	Peoria, Ill.	J. E. McCorvie	2,485	16,519	243	93	2	7/11	150.00
Indianapolis General Hospital[1]	Indianapolis	C. J. Clark	1,295	24,328	363	170	12	7/1	80.00
Indiana University Medical Center[1]	Indianapolis	J. O. Ritchey	1,756	11,363	137	81	7	7/1	68.33
†Methodist Hospital[1]	Indianapolis	R. A. Solomon	3,315	.....	326	105	4	7/1	240.00
Iowa Methodist Hospital[1]	Des Moines, Iowa	J. T. Strawn	2,312	.....	145	91	4	.....	75.00
University Hospitals[1]	Iowa City, Iowa	W. Bean	2,916	3,167	177	101	16	7/1	50.00
University of Kansas Medical Center[1]	Kansas City, Kan.	R. J. Major	1,968	20,150	122	90	7	7	.....
St. Francis Hospital*	Wichita, Kan.	J. B. Fisher	2,504	.....	145	50	2	7/1	125.00
Wesley Hospital[1]	Wichita, Kan.	G. F. Corrigan	1,892	.....	106	42	3	4	100.00
†St. Joseph Hospital*	Lexington, Ky.	J. W. Scott	1,835	.....	147	74	2	7/1	90.00
Louisville General Hospital*	Louisville, Ky.	J. W. Moore	1,426	25,531	309	78	18	7/1	45.00
†St. Joseph Infirmary*	Louisville, Ky.	M. Thompson	2,214	2,381	163	65	3	7/1	75.00
Charity Hospital of Louisiana[1]	New Orleans	.....	6,463	74,686	915	316	31	7/1	25.00
Hotel Dieu, Sisters' Hospital[1]	New Orleans	C. Jamison	1,832	.....	154	65	1	7/1	100.00
†Ochsner Foundation Hospital [1,11]	New Orleans	T. Findley	1,561	27,204	41	32	18	Varies	150.00
Southern Baptist Hospital[1]	New Orleans	M. E. St. Martin	2,691	.....	212	...	2	7/1	150.00
Touro Infirmary*	New Orleans	S. B. Nadler	2,316	6,837	145	65	5	.....	17.50
†Shreveport Charity Hospital*	Shreveport, La.	M. D. Hargrove	2,772	13,129	239	104	5	7/1	60.00
†Maine General Hospital*	Portland, Me.	E. R. Blaisdell	1,234	1,507	135	42	4	.....	50.00
Baltimore City Hospitals[1]	Baltimore	C. H. Boyd	1,766	.....	381	176	13	7/1	15.00
Church Home and Hospital[1]	Baltimore	Z. R. Morgan	597	735	62	28	2	7/1	33.00
Franklin Square Hospital[1]	Baltimore	W. H. Smith	990	1,277	55	26	2	7/1	85.00
Hospital for Women[1]	Baltimore	W. Fort	588	2,758	29	10	3	7/1	85.00
Johns Hopkins Hospital*	Baltimore	A. M. Harvey	4,001	29,203	313	211	10	7/1	41.66
Maryland General Hospital[1]	Baltimore	J. E. Legge	864	390	144	40	3	7/1	50.00
Mercy Hospital*	Baltimore	H. R. Peters	1,250	5,637	135	59	4	7/1	50.00
Provident Hospital and Free Dispensary[1]	Baltimore	E. B. Jarrett	.....	.....	108	33	2	.....	.....
St. Agnes' Hospital*	Baltimore	L. P. Gundry	1,281	192	115	48	4	.....	.....
St. Joseph's Hospital*	Baltimore	F. J. Geraghty	1,911	1,691	141	41	3	7/1	50.00
Sinai Hospital*	Baltimore	M. Sherry	1,706	.....	165	86	6	7/1	25.00
South Baltimore General Hospital[1]	Baltimore	G. McLean	760	2,093	95	34	3	6/1	75.00
Union Memorial Hospital*	Baltimore	R. G. Hills	1,462	2,129	156	90	6	.....	.....
University Hospitals[1]	Baltimore	T. N. Carey	1,906	7,815	234	108	7	7/1	.....
West Baltimore General Hospital[1]	Baltimore	L. A. M. Krause	1,121	486	...	...	2	...	.....
†Beverly Hospital*	Beverly, Mass.	A. E. Parkhurst	1,555	723	98	64	1	7/1	50.00
Beth Israel Hospital[1]	Boston	H. L. Blumgart	1,705	13,630	149	99	5	4/1	79.16
Boston City Hospital[1]	Boston	J. M. Lynch	12,384	43,974	1,852	556	8	.....	.....
Carney Hospital*	Boston	.....	2,663	3,436	88	30	1	.....	.....
†Faulkner Hospital*	Boston	J. A. Halsted	876	.....	...	...	3	1, 7	.....
Lahey Clinic [1]	Boston	.....	.....	.....	...	...	20	.....	.....
Massachusetts General Hospitals[1]	Boston	J. H. Means	1,825	.....	214	133	47	.....	.....
Massachusetts Memorial Hospitals[1]	Boston	C. S. Keefer	1,515	4,848	94	66	18	7/1	50.00
New England Center Hospital [1,3,8]	Boston	S. Proger	3,900	1,847	38	26	13	7/1	83.33
†New England Deaconess Hospital[1]	Boston	H. F. Root	.....	.....	...	...	4	.....	.....
Peter Bent Brigham Hospital[1]	Boston	G. W. Thorn	2,352	22,157	150	98	6	.....	.....
Cambridge City Hospital*	Cambridge, Mass.	J. M. Flynn	1,483	5,277	245	113	1	7/1	58.33
†Mount Auburn Hospital[1]	Cambridge, Mass.	J. H. Townsend	1,004	2,764	27	12	2	7/1	50.00
Truesdale Hospital*	Fall River, Mass.	.....	1,004	.....	93	41	1	.....	.....
†Malden Hospital	Malden, Mass.	F. G. Thorp	1,535	.....	150	72	3	7/1	50.00
†Cooley Dickinson Hospital[1]	Northampton, Mass.	J. E. Hayes	3,084	.....	179	64	1	7/1	50.00
Salem Hospital*	Salem, Mass.	S. N. Gardner	1,331	342	171	53	1	.....	50.00
†Springfield Hospital[1]	Springfield, Mass.	O. J. Menard	1,203	1,904	140	48	3	7/1	50.00
†Memorial Hospitals[1]	Worcester, Mass.	H. Mansfield	2,959	2,596	179	48	1	7/1	100.00
St. Vincent Hospital*	Worcester, Mass.	J. J. Dumphy	2,060	.....	190	83	3	7/1	41.67
Worcester City Hospital[1]	Worcester, Mass.	G. W. Ballantyne	.....	.....	...	...	4	7/1	50.00
St. Joseph's Mercy Hospital[1]	Ann Arbor, Mich.	M. Marshall	1,505	.....	145	58	3	7/1	125.00
University Hospitals[1]	Ann Arbor, Mich.	O. C. Sturgis	3,470	40,129	208	143	29	7/1	111.80
Alexander Blain Hospital	Detroit	L. E. Heavner	696	10,751	27	33	2	7	100.00
Charles Godwin Jennings Hospital*	Detroit	J. B. Hartzell	869	4	1	1	2	7/1	250.00
City of Detroit Receiving Hospital*	Detroit	G. B. Myers	2,780	99,052	678	281	16	7/1	188.00
Grace Hospitals[1]	Detroit	I. T. Colvin	9,862	17,726	322	141	7	7/1	75.00
Harper Hospitals[1]	Detroit	R. C. Moehlig	2,249	18,401	200	76	12	7/1	.....
Henry Ford Hospitals[1]	Detroit	F. J. Sladen	4,018	134,555	213	94	47	7/1	200.00
Mount Carmel Mercy Hospitals[1]	Detroit	H. L. Smith	2,942	.....	285	68	5	7/1	150.00
Providence Hospitals*	Detroit	N. E. Clarke	1,387	.....	184	94	4	7/1	140.00
St. Mary's Hospitals*	Detroit	W. J. Wilson, Jr.	1,749	.....	192	71	1	7/1	125.00
Woman's Hospitals[1]	Detroit	B. I. Johnstone	965	.....	54	21	1	7/1	125.00
Wayne County General Hosp. and Infirmary[1]	Eloise, Mich.	M. R. McQuiggan	9,446	52,454	865	215	13	7/1	235.00
Hurley Hospitals*	Flint, Mich.	M. S. Chambers	2,869	.....	251	77	5	7/1	135.00
Blodgett Memorial Hospitals[1]	Grand Rapids, Mich.	N. L. Avery	785	.....	93	47	3	7	100.00
Butterworth Hospitals[1]	Grand Rapids, Mich.	L. P. Ralph	1,437	798	159	76	2	7/1	100.00
Highland Park General Hospitals[1]	Highland Park, Mich.	.....	1,084	.....	98	43	3	.....	.....
†Pontiac General Hospitals[1]	Pontiac, Mich.	D. Smith	.....	.....	...	...	3	7/1	75.00

Numerical and other references will be found on page 225.

8. INTERNAL MEDICINE—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Fellowships Offered*	Beginning of Service (1949)	Beginning Stipend (Month)
†Saginaw General Hospital[a1]	Saginaw, Mich.	B. M. Bullington	2,229	337	127	79	1	7/1	$ 75.00
St. Mary's Hospital*	Duluth, Minn.	P. J. Boman	1,482	.....	112	67	1	.....	.....
Asbury Hospital[a1]	Minneapolis	C. A. McKinlay	5,885	1,923	100	41	1	10/1	150.00
Minneapolis General Hospital[a1]	Minneapolis	G. E. Fahr	2,311	12,183	379	178	7	1/1, 7/1	115.00
†Northwestern Hospital[a1]	Minneapolis	C. A. McKinlay	2,148	.....	114	66	2	7/1	150.00
St. Barnabas Hospital[a1]	Minneapolis	.....	1,724	.....	169	119	1	.....	.....
University of Minnesota Hospitals[a1]	Minneapolis	C. J. Watson	1,103	25,435	115	82	18	.....	.....
Mayo Foundation	Rochester, Minn.	R. M. Wilder	.....	.....	...	...	108	.....	92.50
Aneker Hospital*	St. Paul	C. B. Drake	1,558	11,022	260	178	7	4, 7, 10	91.50
Charles T. Miller Hospital*	St. Paul	E. T. R. Richards and C. N. Hensel	2,091	9,081	119	55	3	.....	.....
St. Joseph's Hospital*	St. Paul	H. Richardson	2,143	.....	127	50	1	.....	115.00
St. Louis County Hospital*	Clayton, Mo.	R. J. Muether	1,028	17,171	165	98	5	7/1	80.00
Kansas City General Hospital No. 1*	Kansas City, Mo.	D. A. Williams	2,562	20,020	467	226	11	7	50.00
Menorah Hospital[a1]	Kansas City, Mo.	A. Sophian	1,386	.....	81	32	2	7/1	125.00
Research Hospital[a1]	Kansas City, Mo.	R. C. Davis	1,765	2,732	149	85	1	7/1	.....
St. Joseph's Hospital*	Kansas City, Mo.	.....	2,769	.....	162	88	1	.....	.....
St. Luke's Hospital[a1]	Kansas City, Mo.	.....	3,513	.....	82	...	..	.....	.....
St. Mary's Hospital[a1]	Kansas City, Mo.	H. M. Parker	1,072	.....	106	62	1	7/1	125.00
Barnes Hospital[a1]	St. Louis	W. Barry Wood	4,191	29,423	182	147	30	7/1	25.00
De Paul Hospital*	St. Louis	E. P. Buddy	1,682	1,041	172	46	3	7/1	90.00
Homer G. Phillips Hospital[a1]	St. Louis	T. Hunter	2,327	15,383	380	77	7	7/1	95.00
Jewish Hospital[a1]	St. Louis	.....	3,086	.....	250	89	5	7	50.00
Missouri Baptist Hospital[a1]	St. Louis	T. G. Drake	2,427	.....	...	...	3	7/1	75.00
Missouri Pacific Hospital	St. Louis	L. B. Harrison	.....	.....	...	...	3	.....	.....
St. Anthony's Hospital*	St. Louis	R. V. Powell	1,362	.....	91	48	1	6	125.00
St. John's Hospital*	St. Louis	C. H. Nellson	1,913	1,703	199	74	3	7/1	85.00
St. Louis City Hospital[a1]	St. Louis	Taussig, Sexton, Murphy	3,740	6,787	654	235	13	7/1	95.00
St. Luke's Hospital[a1]	St. Louis	W. G. Becke	3,199	.....	...	...	3	7/1	.....
St. Mary's Group of Hospitals*	St. Louis	R. A. Kinsella	2,930	33,593	239	104	11	7/1	85.00
Montana Deaconess Hospital*	Great Falls, Mont.	F. R. Schemm	1,514	780	111	61	3	.....	200.00
Creighton Memorial St. Joseph's Hospital[a1]	Omaha	A. Sachs	2,915	.....	188	53	2	7/1	100.00
†Nebraska Methodist Hospital[a1]	Omaha	J. E. Kirk	1,422	.....	80	34	2	.....	100.00
†University of Nebraska Hospital[a1]	Omaha	H. C. Lueth	518	1,842	32	29	9	7/1	75.00
Mary Hitchcock Memorial Hospital[a1]	Hanover, N. H.	N. T. Milliken	1,358	9,562	62	51	3	7/1	150.00
Atlantic City Hospital*	Atlantic City, N. J.	D. W. Scanlan	1,186	3,340	127	45	2	7/1	50.00
†Englewood Hospital[a1]	Englewood, N. J.	W. W. Schmidt	786	1,044	141	40	1	7	100.00
†Hackensack Hospital[a1]	Hackensack, N. J.	E. W. Black	1,504	5,228	200	...	4	7/1	100.00
Jersey City Hospital[a1]	Jersey City, N. J.	T. J. White	6,736	26,755	1,040	304	5	.....	.....
Burlington County Hospital	Mount Holly, N. J.	P. S. MacNeal	550	415	78	43	1	7/1	100.00
†Newark Beth Israel Hospital*	Newark, N. J.	A. Parsonnet	1,447	7,189	223	62	2	7/1	25.00
†Orange Memorial Hospital*	Orange, N. J.	.....	.....	.....	...	...	..	.....	.....
†Paterson General Hospital*	Paterson, N. J.	A. G. Markel and J. E. Leach	1,448	639	205	59	..	.....	.....
†St. Francis Hospital*	Trenton, N. J.	.....	1,952	507	253	62	2	11/1, 7/1	100.00
Albany Hospital[a1]	Albany, N. Y.	R. T. Beebe	1,974	7,576	231	114	4	7/1	41.67
Binghamton City Hospital*	Binghamton, N. Y.	R. C. Bates	3,055	.....	289	98	7	7/1	60.00
†Beth-El Hospital[a1]	Brooklyn	I. Feder	1,126	14,118	113	32	2	1, 7	100.00
Brooklyn Hospital[a1]	Brooklyn	E. P. Maynard, Jr.	2,222	16,278	...	...	4	7/1	25.00
Coney Island Hospital[a1]	Brooklyn	T. J. Longo	1,427	20,379	209	62	3	7/1	80.00
Cumberland Hospital[a1]	Brooklyn	J. J. Guttman	1,556	20,756	220	57	2	7/1	70.00
Greenpoint Hospital[a1]	Brooklyn	A. Klein	1,158	16,464	299	34	2	7/1	80.00
Jewish Hospital[a1]	Brooklyn	.....	1,845	26,920	200	56	3	.....	55.00
Kings County Hospital[a1]	Brooklyn	W. Dock and H. Feinblatt	13,674	31,492	2,518	369	18	7/1	80.00
Long Island College Hospital[a1]	Brooklyn	J. H. Crawford	2,025	5,234	176	46	5	7/1	25.00
†Maimonides Hospital, Israel Zion Division[a1]	Brooklyn	D. Seegal	1,449	6,067	155	31	7	7/1	75.00
Methodist Hospital[a1]	Brooklyn	I. L. Chaet and A. T. Mays	1,409	6,563	136	62	5	7/1	25.00
Norwegian Lutheran Deaconesses' Home and Hospital[a1]	Brooklyn	.....	.....	564	111	...	2	7/1	25.00
St. Catherine's Hospital[a1]	Brooklyn	V. Anello and M. A. Murphy	926	2,933	161	39	2	7/1	75.00
†St. John's Hospital[a1]	Brooklyn	L. B. Eckerson	1,233	.....	101	24	1	7/1	95.00
St. Mary's Hospital*	Brooklyn	H. F. Beakey	742	941	94	20	1	7/1	60.00
Buffalo General Hospital[a1]	Buffalo	J. H. Talbott	2,296	14,382	253	135	13	7/1	25.00
†Deaconess Hospital*	Buffalo	.....	1,938	1,092	242	78	2	7/1	60.00
Edward J. Meyer Memorial Hospital[a1]	Buffalo	D. E. Miller	1,770	9,021	194	105	18	7/1	100.00
Emergency Hospital of the Sisters of Charity*	Buffalo	D. Brumberg	1,070	8,527	172	39	1	1/1	150.00
Millard Fillmore Hospital*	Buffalo	J. F. Painton	1,906	.....	196	91	6	7/1	50.00
†Clifton Springs Sanitarium and Clinic[1]	Clifton Springs, N. Y.	B. A. Watson	2,444	4,165	47	19	2	.....	.....
Mary Imogene Bassett Hospital[a1]	Cooperstown, N. Y.	J. Bordley	797	4,412	54	37	3	7/1	83.33
†Flushing Hospital and Disp.[a1]	Flushing, N. Y.	D. J. Swan	.....	.....	...	...	1	7/1	150.00
Meadowbrook Hospital[a1]	Hempstead, N. Y.	E. C. Jessup and B. R. Allison	1,129	5,510	143	62	2	7/1	115.00
†Cornell University Infirmary[2]	Ithaca	N. S. Moore	1,696	1,136	1	1	2	7/1	908.33
Queens General Hospital[a1]	Jamaica, N. Y.	J. R. Reuling	5,093	46,854	1,015	417	42	7/1	80.00
Charles S. Wilson Memorial Hospital[a1]	Johnson City, N. Y.	J. C. Zillhardt	2,508	.....	216	78	3	7/1	.....
†Mount Vernon Hospital*	Mount Vernon, N. Y.	P. Reznikoff	1,812	623	199	66	2	7/1	125.00
New Rochelle Hospital*	New Rochelle, N. Y.	C. A. Read	1,978	1,540	213	55	3	.....	.....
Bellevue Hospital, Div. I—Columbia Univ.[a1]	New York City	D. W. Richards, Jr.	2,719	16,500	284	90	6	7/1	70.00
Bellevue Hospital, Div. II—Cornell Univ.[a1]	New York City	J. E. Dietrick	2,352	25,114	176	44	7	7/1	70.00
Bellevue Hospital, Div. III—N. Y. Univ.[a1]	New York City	W. Tillett	.....	.....	...	...	11	1, 7	60.00
Bellevue Hospital, Div. IV—Open Div.[a1]	New York City	C. Nammack	.....	.....	...	...	4	1, 7	60.00
Beth Israel Hospital[a1]	New York City	A. M. Fishberg	1,164	12,413	131	43	6	7/1	50.00
Bronx Hospital[a1]	New York City	H. Wessler	2,048	30,680	171	30	4	7/1	75.00
†Doctors Hospital[1]	New York City	.....	1,698	.....	101	41	3	7/1	200.00
Flower and Fifth Avenue Hospitals[a1]	New York City	L. J. Boyd	1,002	4,473	112	33	4	7/1	.....
Fordham Hospital[a1]	New York City	W. Walker and J. S. Kenney	3,954	10,365	966	171	4	7/1	80.00
Goldwater Memorial Hospital[a1]	New York City	M. Rosenbluth and R. D. Beck	1,783	1,181	326	128	31	7/1	70.00
Gouverneur Hospital[a1]	New York City	S. N. Weber	1,154	29,323	366	49	6	7/1	80.00
Harlem Hospital[a1]	New York City	B. P. Stivelman	7,448	31,087	1,391	4	8	7, 1	80.00
†Hospital for Joint Diseases[a1]	New York City	.....	.....	.....	...	...	..	.....	.....

Numerical and other references will be found on page 225.

8. INTERNAL MEDICINE—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
†Jewish Memorial Hospital[a1]	New York City	J. R. Murphy	.....	.....	...	...	..	.....	.....
†Knickerbocker Hospital[a1]	New York City	A. Garbat and C. de la Chapelle	.....	.....	...	...	1	7/1	.....
Lenox Hill Hospital[a1]	New York City		1,172	.....	109	44	2	7/1	$ 50.00
Lincoln Hospital[a1]	New York City	K. S. Taylor	3,837	19,974	665	107	10	.....	.....
†Memorial Hospital[1]	New York City		.....	.....	...	...	1	.....	.....
Metropolitan Hospital[a1]	New York City	L. J. Boyd	3,609	40,369	545	110	6	7/1	130.00
Montefiore Hospital for Chronic Diseases[a1]	New York City	L. Leiter	1,188	.....	197	93	7	7/1	50.00
Morrisania City Hospital[a1]	New York City	E. Flood and S. Biloon	3,607	9,542	841	100	11	7/1	80.00
Mount Sinai Hospital[a1]	New York City	G. Baehr and I. Snapper	.....	.....	...	...	26	.....	50.00
New York City Hospital[a1]	New York City	B. Donaldson and H. Marks	3,384	29,697	423	135	8	7/1	80.00
New York Hospital[a]	New York City	D. P. Barr	3,575	27,011	131	109	20	7/1	25.00
New York Infirmary[a1]	New York City	M. E. Mauter	620	2,376	15	8	1	7	75.00
New York Polyclinic Medical School and Hospital[a1]	New York City		1,638	5,844	100	15	2	7/1	50.00
Presbyterian Hospital[a1]	New York City	R. F. Loeb	5,653	36,179	239	...	28	.....	41.66
Roosevelt Hospital[a1]	New York City	H. F. Shattuck and J. M. Freson	2,573	10,130	242	102	8	7/1	70.00
†St. Barnabas Hospital for Chronic Diseases[1]	New York City	A. J. Patek, Jr.	450	3,009	53	25	1	7	75.00
†St. Clare's Hospital[a1]	New York City	J. P. Croce	2,312	9,263	103	58	3	7/1	25.00
St. Luke's Hospital[a]	New York City	J. H. Keating	2,495	12,033	221	99	10	7/1	50.00
St. Vincent's Hospital[a1]	New York City	F. W. Baldwin	2,930	59,038	450	163	12	7/1	50.00
†Sydenham Hospital[a]	New York City	E. Appelbaum	857	3,037	96	29	2	7	35.00
University Hospital[a1]	New York City	W. G. Lough	1,613	17,714	98	52	3	7/1	50.00
Genesee Hospital[a1]	Rochester, N. Y.	C. Holler	1,167	2,791	160	99	4	7	41.66
†Highland Hospital[a1]	Rochester, N. Y.	E. B. Soble	.....	.....	...	...	1	.....	100.00
Rochester General Hospital[a1]	Rochester, N. Y.	L. F. Allen	1,577	5,157	200	129	3	7/1	70.00
St. Mary's Hospital[a1]	Rochester, N. Y.	J. R. Mayer	3,067	5,510	247	90	5	7/1	125.00
Strong Memorial-Rochester Municipal Hosps.[a1]	Rochester, N. Y.	W. S. McCann	4,024	19,463	386	252	19	.....	45.00
Ellis Hospital[a1]	Schenectady, N. Y.	H. E. Reynolds	2,956	.....	288	101	2	.....	100.00
†St. Vincent's Hospital	Staten Island, N. Y.		.....	.....	...	...	..	.....	.....
†Staten Island Hospital[a]	Staten Island, N. Y.		.....	.....	...	...	..	.....	.....
Hospital of the Good Shepherd[a1]	Syracuse, N. Y.	R. Lyons	1,326	.....	151	80	5	7/1	125.00
Grasslands Hospital[a1]	Valhalla, N. Y.	R. R. Heffner	953	6,683	176	118	4	7	.....
†White Plains Hospital[a]	White Plains, N. Y.	E. W. Weber	.....	.....	...	...	2	7/1	75.00
Charlotte Memorial Hospital[a]	Charlotte, N. C.	T. W. Baker	1,989	2,922	126	63	2	7/1	60.00
Duke Hospital[a1]	Durham, N. C.	F. A. Stead	2,804	21,034	129	81	25	7/1	83.33
Watts Hospital[a]	Durham, N. C.		2,892	8,061	122	46	3	7/1	50.00
James Walker Memorial Hospital[a1]	Wilmington, N. C.		2,163	5,441	135	20	1	.....	.....
City Memorial Hospital[a1]	Winston-Salem, N. C.		4,044	1,012	131	54	2	.....	.....
†Kate Bitting Memorial Hospital[a]	Winston-Salem, N. C.	S. F. Pfohl	1,376	3,474	180	45	1	7	75.00
North Carolina Baptist Hospital[a1]	Winston-Salem, N. C.		1,986	9,755	96	58	22	7/1	.....
Bismarck Evangelical Hospital	Bismarck, N. D.		1,188	115,000	88	48	1	.....	115.00
†St. Luke's Hospital[a]	Fargo, N. D.	W. A. Stafne	.....	.....	...	...	1	.....	100.00
Trinity Hospital[a]	Minot, N. D.		549	14,642	...	...	1	.....	.....
City Hospital[a]	Akron, Ohio		3,432	4,361	328	171	3	7/1	100.00
Peoples Hospital[a1]	Akron, Ohio	R. F. Jukes	1,587	2,950	111	65	4	7/1	100.00
St. Thomas Hospital[a]	Akron, Ohio	P. R. Adams	.....	.....	...	...	2	7	125.00
†Aultman Hospital[a1]	Canton, Ohio	H. W. Beck	3,934	141	212	111	2	7/1	75.00
Mercy Hospital[a]	Canton, Ohio	I. B. Hamilton	1,758	110	147	45	2	7/1	100.00
Christ Hospital[a]	Cincinnati	D. A. Tucker	1,411	7,428	180	83	4	7/1	75.00
Cincinnati General Hospital[a1]	Cincinnati	A. Blankenhorn	2,233	33,361	641	282	32	7/1	.....
Deaconess Hospital[a]	Cincinnati	L. B. Owens	3,121	.....	143	28	1	1/1	125.00
Good Samaritan Hospital[a]	Cincinnati	J. N. Ganfu	4,308	995	203	80	6	.....	75.00
Jewish Hospital[a1]	Cincinnati	R. Rothenberg	2,402	.....	250	123	7	7/1	60.00
City Hospital[a1]	Cleveland	R. W. Scott	2,194	23,211	549	291	18	7/1	60.00
Cleveland Clinic Hospital[1]	Cleveland	R. Haden	883	45,513	50	21	21	7/1	100.00
Mount Sinai Hospital[a1]	Cleveland	H. S. Appelbaum	1,184	9,385	109	37	3	7/1	65.00
St. Alexis Hospital[a1]	Cleveland	H. V. Paryzek	2,360	3,081	179	46	2	7/1	90.00
St. John's Hospital[a1]	Cleveland	W. M. Gill	1,511	831	150	42	3	7/1	.....
St. Luke's Hospital[a]	Cleveland	L. Taylor	2,963	18,694	217	94	5	6/25	60.00
St. Vincent Charity Hospital[a]	Cleveland	C. S. Stone	1,646	22,700	37	38	3	7/1	75.00
University Hospitals[a1]	Cleveland	J. T. Wearn	3,900	24,583	382	...	17	7/1	25.00
†Mount Carmel Hospital[a1]	Columbus, Ohio	P. T. Knies	1,315	50	137	45	2	7/1	110.00
Ohio State University Hospital[a1]	Columbus, Ohio	B. K. Wiseman	1,049	19,254	117	71	13	7/1	50.00
St. Francis Hospital[a]	Columbus, Ohio	L. H. Van Buskirk	1,133	.....	153	62	2	.....	.....
White Cross Hospital[a]	Columbus, Ohio	R. W. Kissane	2,028	.....	113	67	3	7	100.00
Miami Valley Hospital[a]	Dayton, Ohio	H. Koppe	2,347	.....	258	114	3	7/1	75.00
Huron Road Hospital[a1]	East Cleveland, Ohio	E. A. Marshall	1,223	3,602	140	70	2	7/1	80.00
†Lakewood Hospital[a]	Lakewood, Ohio	J. T. Ledman	881	1,420	98	51	2	7/1	100.00
Maumee Valley Hospital[a]	Maumee, Ohio		2,556	9,284	267	138	3	.....	125.00
†Mercy Hospital[a]	Toledo, Ohio	N. Morris and G. W. Bascom	3,460	187	251	103	1	10/15	.....
St. Vincent's Hospital[a1]	Toledo, Ohio	C. J. Czarnecki	2,290	1,968	206	57	1	7	100.00
Toledo Hospital[a]	Toledo, Ohio	J. L. Stifel	2,724	813	144	71	3	.....	.....
St. Elizabeth's Hospital[a1]	Youngstown, Ohio	M. W. Nelthus	2,786	1,331	238	48	2	7/1	125.00
Youngstown Hospital[a]	Youngstown, Ohio	W. H. Bunn	3,451	339	245	114	6	7/1	100.00
St. Anthony Hospital[a]	Oklahoma City	P. M. McNeill	1,765	1,160	175	49	1	7/1	75.00
University Hospitals[a]	Oklahoma City	R. Q. Goodwin	768	7,144	100	34	8	7/1	35.00
†Hillcrest Memorial Hospital[a1]	Tulsa, Okla	O. L. Hill	2,681	.....	144	34	3	.....	.....
†St. John's Hospital[a1]	Tulsa, Okla	E. R. Denny	2,336	.....	134	52	1	.....	150.00
Emanuel Hospital[a1, 41]	Portland, Ore	J. E. Field	1,712	.....	134	55	3	7/1	75.00
Good Samaritan Hospital[a]	Portland, Ore	W. C. Panton	2,736	.....	192	78	1	7/1	75.00
Providence Hospital[a]	Portland, Ore	H. Haney	2,241	1,432	171	83	2	7/1	75.00
St. Vincent's Hospital[a]	Portland, Ore		.....	.....	...	...	3	.....	.....
University of Oregon Medical School Hospitals and Clinics[a1]	Portland, Ore	H. P. Lewis	1,454	21,867	291	200	7	7/1	75.00
Abington Memorial Hospital[a]	Abington, Pa	J. T. Beardwood	1,670	2,575	144	58	3	7/1	50.00
Sacred Heart Hospital[a]	Allentown, Pa	A. W. Dubbs	1,844	4,165	224	79	1	7/1	150.00
†Bradford Hospital	Bradford, Pa	C. Barnes	.....	.....	...	...	..	.....	.....
Bryn Mawr Hospital[a]	Bryn Mawr, Pa	W. W. Dyer	405	.....	51	25	2	7/1, 10/1	75.00
George F. Geisinger Memorial Hospital[a]	Danville, Pa	W. J. Stainsby	2,555	14,717	125	55	3	.....	75.00
Hamot Hospital[a1]	Erie, Pa	T. F. Tredway	995	1,775	102	47	1	7/1	150.00
†Westmoreland Hospital[a1]	Greensburg, Pa		.....	.....	...	...	..	.....	.....
†Harrisburg Hospital[a1]	Harrisburg, Pa	F. F. D. Reckord	1,398	6,060	151	47	..	7/1	100.00

Numerical and other references will be found on page 225.

8. INTERNAL MEDICINE—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatients Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [6]	Beginning of Service (1949)	Beginning Stipend (Month)
Harrisburg Polyclinic Hospital*	Harrisburg, Pa.		942	1,478	158	42	1	10/1	$150.00
†Episcopal Hospital[a1]	Philadelphia	J. H. Arnett and G. E. Farrar	1,323	5,306	200	86	3	7/1	50.00
Germantown Dispensary and Hospital*	Philadelphia		1,389	6,317	164	59	1	7	50.00
Graduate Hosp. of the Univ. of Pennsylvania*[a1]	Philadelphia		1,353	11,145	102	36	4	7/1	.....
Hahnemann Hospital*[a1]	Philadelphia	C. L. Brown	2,671	10,391	275	124	4	.....	25.00
Hospital of the Univ. of Pennsylvania*[a1]	Philadelphia	F. Wood	3,317	10,676	209	154	26	7/1	25.00
Hospital of the Woman's Medical College of Pennsylvania*[a1]	Philadelphia	W. G. Leaman	576	5,216	31	20	3	7/1	60.00
Jefferson Medical College Hospital	Philadelphia	H. A. Reimann	2,930	12,222	240	124	14	7/1	.....
Jewish Hospital*[a1]	Philadelphia		1,864	2,833	224	105	6	7	50.00
†Lankenau Hospital*	Philadelphia	E. L. Bortz and F. L. Hartmann	1,399	.....	169	93	4	7/1	50.00
Mount Sinai Hospital*[a1]	Philadelphia		1,623	13,933	193	137	4	6/21	50.00
Pennsylvania Hospital*	Philadelphia	G. G. Duncan	1,932	6,515	210	88	6	1/1, 7/1	20.00
Philadelphia General Hospital*[a1]	Philadelphia		5,188	.....	1,115	...	26	7/1	70.00
Presbyterian Hospital*	Philadelphia	J. P. Scott	.....	.....	.....	...	2	.....	25.00
Temple University Hospital*[a1]	Philadelphia	R. A. Kern	2,161	5,856	175	66	11	7/1	.....
Woman's Hospital*	Philadelphia		482	5,182	19	11	1	7/1	50.00
Allegheny General Hospital*	Pittsburgh	W. T. Mitchell, Jr.	414	4,595	62	14	2	7/1	100.00
Elizabeth Steel Magee Hospital[1]	Pittsburgh	J. D. Heard	1,259	377	88	33	3	7/1	41.67
Mercy Hospital*[a1]	Pittsburgh	W. W. G. Maclachlan	2,024	5,190	119	40	3	9/1	100.00
Montefiore Hospital*	Pittsburgh	L. Wechsler and L. H. Criep	1,598	3,181	228	97	4	7/1	50.00
Presbyterian Hospital*[a1]	Pittsburgh	A. H. Colwell	1,714	.....	142	45	7	.....	41.67
St. Francis Hospital*[a1]	Pittsburgh		1,548	1,617	193	46	3	7/1	100.00
Western Pennsylvania Hospital*[a1]	Pittsburgh		3,549	3,702	318	69	3	1/1	75.00
Reading Hospital*	Reading, Pa.	R. M. Alexander	1,068	976	203	94	1	7/1	100.00
St. Joseph's Hospital*	Reading, Pa.	M. Wasserweig	1,377	.....	...	...	.....	.....	.....
Robert Packer Hospital*	Sayre, Pa.	S. D. Conklin	2,801	6,502	122	75	6	7/1	150.00
†Scranton State Hospital*[a1]	Scranton, Pa.	P. J. McDonnell	1,295	3,125	187	55	1	9/1	250.00
Wilkes-Barre General Hospital*	Wilkes-Barre, Pa.	G. E. Baker	3,075	5,305	178	44	1	5/1	100.00
†York Hospital*	York, Pa.	H. B. Thomas	1,511	1,125	243	88	1	7/1	100.00
Rhode Island Hospital*[a1]	Providence, R. I.	H. A. Lawson	2,263	10,116	355	150	5	1/1, 7/1	50.00
Roper Hospital*[a1]	Charleston, S. C.	J. A. Boone	1,637	6,609	173	68	5	7/1	25.00
Columbia Hospital*[a1]	Columbia, S. C.	A. I. Josey	3,239	8,470	290	74	2	7/1	75.00
Greenville General Hospital*[a1]	Greenville, S. C.	G. R. Wilkinson	2,712	9,569	79	37	2	7/1	100.00
Baroness Erlanger Hospital*[a1]	Chattanooga, Tenn.		3,270	4,369	338	69	3	.....	.....
Knoxville General Hospital*	Knoxville, Tenn.	R. B. Wood	1,208	3,724	169	31	1	7/1	70.00
†Baptist Memorial Hospital*	Memphis, Tenn.	C. H. Sanford	2,140	161	138	21	2	7/1	75.00
John Gaston Hospital*	Memphis, Tenn.	C. H. Sanford	2,467	22,237	444	283	11	.....	.....
†St. Joseph Hospital*[a1]	Memphis, Tenn.	S. Blackwell	2,297	210	250	89	1	.....	.....
George W. Hubbard Hospital of Meharry Medical College*	Nashville, Tenn.	W. H. Grant	784	5,498	79	27	3	7/1	75.00
Nashville General Hospital*	Nashville, Tenn.	T. F. Frist	.....	.....	...	...	5	.....	.....
St. Thomas Hospital*	Nashville, Tenn.	W. R. Cate	1,356	.....	120	51	2	7/1	75.00
Vanderbilt University Hospital*[a1]	Nashville, Tenn.	H. J. Morgan	2,195	29,943	120	75	6	7/1	39.41
Baylor University Hospital*[a1]	Dallas, Texas.	H. M. Winans	1,885	3,641	177	70	4	7/1	50.00
Methodist Hospital*	Dallas, Texas.		1,596	833	146	35	4	7/1	75.00
Parkland Hospital*[a1]	Dallas, Texas.	T. Harrison	1,196	5,142	197	121	7	7/1	50.00
†St. Paul's Hospital*	Dallas, Texas.	T. M. Kirksey	606	2,888	45	8	3	7/1	100.00
Harris Hospital*[a1]	Fort Worth, Texas.	W. S. Horn	2,836	1,397	102	53	3	7/1	100.00
University of Texas Medical Branch Hosps.*[a1]	Galveston, Texas.	C. T. Stone	1,522	13,323	217	125	15	7	50.00
Hermann Hospital*[a1]	Houston, Texas.	J. A. Greene	1,612	4,374	129	52	7	.....	50.00
Jefferson Davis Hospital*[a1]	Houston, Texas.	S. McDaniel	1,986	17,967	398	97	4	7/1	50.00
Memorial Hospital	Houston, Texas.	T. W. Burke	2,519	.....	171	35	3	.....	.....
Methodist Hospital*[a1]	Houston, Texas.	H. W. Cummings	1,368	356	106	48	4	7/1	75.00
Southern Pacific Hospital	Houston, Texas.	M. D. Levy	822	16,656	22	13	3	.....	125.00
Scott and White Hospital*	Temple, Texas.	V. M. Longmire	1,767	.....	53	23	20	.....	150.00
Wichita Falls Clinic Hospital*	Wichita Falls, Texas.	O. B. Kiel	1,774	28,501	20	10	1	7/1	300.00
Thomas D. Dee Memorial Hospital*	Ogden, Utah.		.....	.....	...	...	...	.....	.....
Dr. W. H. Groves Latter-Day Saints Hospital*[a1]	Salt Lake City.	T. A. Clawson	3,627	1,154	289	112	2	7/1	75.00
Holy Cross Hospital*[a1]	Salt Lake City.	F. B. Bailey	973	.....	86	29	1	7/1	50.00
Salt Lake County General Hospital*[a1]	Salt Lake City.	M. T. Wintrobe	1,151	12,441	137	106	9	7/1	50.00
†Bishop DeGoesbriand Hospital*[a1]	Burlington, Vt.	C. M. Terrien	870	1,300	67	28	1	7/1	100.00
Mary Fletcher Hospital*[a1]	Burlington, Vt.	E. L. Amidon	1,183	356	72	44	7	7/1	100.00
Alexandria Hospital*[a1]	Alexandria, Va.	H. A. Latane	808	.....	83	31	2	7/1	100.00
Arlington Hospital*[a1]	Arlington, Va.	R. Schwartz	889	.....	90	46	2	.....	100.00
University of Virginia Hospital*[a1]	Charlottesville, Va.	H. B. Mulholland	2,644	10,084	153	69	12	7/1	63.00
Chesapeake and Ohio Hospital	Clifton Forge, Va.	J. R. Beckwith and A. E. LeHew	3,159	4,773	102	44	3	7/1	63.00
De Paul Hospital*[a1]	Norfolk, Va.	W. B. Martin	2,872	1,588	157	65	3	7/1	75.00
Norfolk General Hospital*	Norfolk, Va.	A. B. Hodges	2,225	.....	...	...	6	7/1	75.00
Johnston-Willis Hospital*[a1]	Richmond, Va.	J. M. Hutcheson	1,537	.....	100	48	2	7/1	50.00
Medical College of Virginia Hosp. Div.*[a1]	Richmond, Va.	W. B. Porter	3,247	6,863	304	103	14	7/1	40.50
†Lewis-Gale Hospital*	Roanoke, Va.	C. D. Nofsinger	1,105	14,551	79	21	2	8/1, 7/1	150.00
Doctors Hospital*	Seattle.	C. I. Krantz	2,459	.....	154	80	2	7/1	100.00
King County Hospital*	Seattle.	R. H. Williams	1,412	12,305	279	93	8	7/1	90.00
Providence Hospital*[a1]	Seattle.	R. F. Foster	2,088	758	118	55	2	7/1	75.00
Swedish Hospital*	Seattle.		.....	.....	...	...	1	.....	.....
Virginia Mason Hospital*	Seattle.	L. J. Palmer	2,851	.....	153	93	6	7/1	75.00
Deaconess Hospital*[a1]	Spokane.	R. B. Hanford	1,575	.....	150	75	1	7/1	150.00
Northern Permanente Hospital*[a1]	Vancouver, Wash.	E. W. Saward	1,565	17,756	23	16	1	.....	.....
†Beckley Hospital	Beckley, W. Va.	D. C. Ashton	1,848	9,562	90	61	1	.....	.....
†Charleston General Hospital*[a1]	Charleston, W. Va.	W. A. Thornhill	1,946	1,512	99	34	5	7/1	100.00
Chesapeake and Ohio Hospital*	Huntington, W. Va.	J. P. Webb	.....	.....	...	...	4	.....	.....
St. Mary's Hospital*	Huntington, W. Va.	L. B. Gang	3,568	.....	183	44	1	7/1	100.00
†La Crosse Lutheran Hospital*[a1]	La Crosse, Wis.	T. Gunderson	.....	.....	...	...	1	7	150.00
Madison General Hospital*	Madison, Wis.	M. A. Foster	1,366	.....	102	48	2	7/1	50.00
St. Mary's Hospital*[a1]	Madison, Wis.	R. N. Allin	1,793	.....	117	53	...	9/1	75.00
State of Wisconsin General Hospital*[a1]	Madison, Wis.	O. O. Meyer	3,348	8,475	131	99	11	1, 7	25.00
†St. Joseph's Hospital*	Marshfield, Wis.	K. H. Doege	1,405	.....	83	39	2	7/1	250.00
Columbia Hospital*	Milwaukee	E. W. Mason	1,051	.....	101	38	4	.....	75.00
Milwaukee County Hospital*[a1]	Milwaukee	J. Shaiken	7,651	14,617	1,008	352	22	Varies	158.00
Milwaukee Hospital*	Milwaukee	J. Huston	1,730	.....	96	51	3	7	75.00
Mount Sinai Hospital*[a1]	Milwaukee	R. A. Frisch	1,208	3,873	39	27	3	7/1	75.00
St. Joseph's Hospital*[a1]	Milwaukee	J. K. Karr	2,975	.....	207	70	3	7	75.00
Queen's Hospital*[a1]	Honolulu, Hawaii	H. Arnold	2,948	9,088	205	122	5	7	75.00

Numerical and other references will be found on page 225.

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9. MALIGNANT DISEASES

Hospitals, 22; Assistant Residencies and Residencies, 110

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
Veterans Administration									
Veterans Admin. Hospital	Hines, Ill.	T. H. Clarke	1,454	.....	221	109	1	.....	$200.00
Nonfederal									
Collis P. and Howard Huntington Memorial Hospital*	Pasadena, Calif.		529	.....	77	50	1	.....	.....
Grady Memorial Hospital[a1]	Atlanta, Ga.	J. E. Scarborough and C. Stewart	345	20,247	17	5	12	7/1	.....
Michael Reese Hospital[a1]	Chicago	E. H. Uhlmann	.....	.....	...	...	1	1/1, 7	25.00
Massachusetts General Hospital*	Boston		.....	.....	...	...	1	.....	.....
New England Deaconess Hospital [1]	Boston	S. L. McKittrick	.....	.....	...	...	[2]	.....	.....
Pondville Hospital	Walpole, Mass.		838	8,395	53	43	8	.....	300.00
Westfield State Sanatorium [1]	Westfield, Mass.	F. Hopkins	.....	8,076	32	25	3	7/1	270.00
Wayne County General Hosp. and Infirmary[a1]	Eloise, Mich.		827	440	207	48	1	.....	225.00
University of Minnesota Hospitals[a1]	Minneapolis	O. L. Wangensteen	312	4,001	1	1	3	.....	.....
Ellis Fischel State Cancer Hospital [1]	Columbia, Mo.	J. J. Modlin	1,470	6,477	37	33	11	7/1	100.00
Barnard Free Skin and Cancer Hospital	St. Louis	C. F. Sherwin and A. N. Arneson	973	11,852	7	3	4	7/1	110.00
Jersey City Hospital[a1]	Jersey City, N. J.	J. B. Fabon	340	2,652	63	29	1	.....	.....
Brooklyn Cancer Institute [1]	Brooklyn	W. E. Howes	854	10,677	262	46	6	1/1	.....
Rosewell Park Memorial Institute [1]	Buffalo	G. L. Sheehan	164	1,168	18	18	5	7/1	.....
Meadowbrook Hospital*	Hempstead, N. Y.	J. W. McChesney	523	.....	110	47	1	7/1	115.00
Memorial Hospital [1]	New York City		.....	.....	...	...	32	.....	.....
Montefiore Hospital for Chronic Diseases[a1]	New York City		768	.....	386	233	4	7/1	50.00
New York City Cancer Institute Hospital [1]	New York City		959	5,945	562	199	7	1, 7	150.00
Duke Hospital[a1]	Durham, N. C.	(Included in Medicine)					..	.....	.....
American Oncologic Hospital [1]	Philadelphia	G. M. Dorrance	823	9,024	48	23	4	7/1	150.00
Jeanes Hospital [1]	Philadelphia		1,364	8,210	96	42	2	7/1	100.00

10. NEUROLOGICAL SURGERY

The following services are approved by the Council and the American Board of Neurological Surgery
Hospitals, 70; Assistant Residencies and Residencies, 183

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
United States Navy										
U. S. Naval Hospital*	Long Beach, Calif.	A. L. Schultz	529	.....	22	22	2	.....	1	n
Veterans Administration										
Veterans Admin. Hospital [1]	San Francisco	O. W. Jones, Jr. and F. W. Lusignan	316	566	10	9	3	7/1	3	$275.00
Veterans Admin. Hospital [1]	Van Nuys, Calif.	J. D. French	196	410	8	7	2	1/1, 7/1	3	140.00
Veterans Admin. Hospital	Chamblee, Ga.	G. Perret	249	60	18	14	3	7/1	1	200.00
Veterans Admin. Hospital	Hines, Ill.	L. Davis	638	.....	40	48	5	1/2, 7/1	3	200.00
†Veterans Admin. Center	Wadsworth, Kan.	F. A. Carmichael	479	3	13	12	1	1, 7	1	n
Veterans Admin. Hospital	Minneapolis, Minn.		129	.....	16	15	2	.....	3	.....
Veterans Admin. Hospital	New York City	P. K. Sauer	349	109	22	11	4	7/1	2	.....
†Veterans Admin. Hospital	Memphis, Tenn.	J. M. Melowsky	485	.....	26	19	2	.....	1	.....
Veterans Admin. Center [1, 48]	White River Jct. Vt.	H. L. Heyl	186	.....	...	...	1	8/25	2	.....
†Veterans Admin. Hospital [1]	Richmond, Va.	J. L. Ulmer	426	.....	16	13	2	7/1	1	n
Nonfederal										
Jefferson-Hillman Hospital[a1]	Birmingham, Ala.	G. Galbraith	760	417	72	26	1	.....	3	.....
Los Angeles County Hospital[a1]	Los Angeles	C. W. Rand	2,140	1,332	224	19	4	Varies	1	165.00
†White Memorial Hospital*	Los Angeles	C. B. Courville	3.6	.....	25	16	1	7/1	1	140.20
Franklin Hospital[a1]	San Francisco	H. A. Brown	651	.....	25	17	2	7/1	1	100.00
University of California Hospital[a1]	San Francisco	H. C. Naffziger	512	1,427	17	13	2	7/1, 8/1, 9/1	3	50.00
Hartford Hospital[a1]	Hartford, Conn.	J. C. Fox, Jr.	879	538	66	52	2	7/1	3	50.00
Grace-New Haven Community Hospital, New Haven Unit (University Service)[a1, 29]	New Haven, Conn.	W. German	420	804	55	30	3	7/1	3	40.00
St. Vincent's Hospital*	Jacksonville, Fla.	J. Lyerly	271	.....	16	...	1	7/1	1	100.00
Emory University Hospital*	Emory University, Ga.	E. F. Fincher	458	.....	21	15	1	7/1	1	75.00
Chicago Memorial Hospital[a1]	Chicago	P. C. Bucy	441	906	21	18	2	1/1	2	200.00
†Cook County Hospital[a1]	Chicago	H. C. Voris	2,372	29	196	...	1	1, 7	1	32.00
Illinois Neuropsychiatric Institute	Chicago	E. Oldberg	605	9,263	38	34	3	.....	3	.....
Mercy Hospital-Loyola University Clinics*	Chicago	H. C. Voris	292	200	16	11	1	.....	1	25.00
Passavant Memorial Hospital[a1, 37]	Chicago		(Included in Neurology)				2	.....	3	.....
Presbyterian Hospital*	Chicago	A. Verbrugghen	220	312	17	14	1	.....	2	25.00
St. Luke's Hospital[a7]	Chicago	E. Oldberg	511	.....	24	17	1	7/1	3	25.00
University of Chicago Clinics[a1]	Chicago	T. B. Rasmussen	168	961	18	17	2	7/1	2	25.00
Wesley Memorial Hospital[a1]	Chicago	(Included in Surgery)					1	.....	3	.....
†University of Kansas Medical Center*	Kansas City, Kan.	F. R. Teachenor	247	250	25	18	1	7	2	.....
†Louisville General Hospital[a17]	Louisville, Ky.	G. Spurling	194	.....	46	30	2	.....	2	.....
†Ochsner Foundation Hospital [1, 41]	New Orleans	D. H. Echols	278	1,447	23	11	2	.....	1	150.00
Johns Hopkins Hospital*	Baltimore	A. E. Walker	650	185	35	24	4	7/1	3	41.66
†University Hospital[a1]	Baltimore	C. Bagley, Jr.	455	670	42	25	2	7/1	3	.....
Boston City Hospital[a1]	Boston	D. Munro	324	.....	59	17	2	.....	2	.....
Lahey Clinic	Boston		.....	.....	...	...	5	.....	3	.....
Massachusetts General Hospital*	Boston	J. C. White	237	.....	32	16	5	.....	3	.....
University Hospital[a1]	Ann Arbor, Mich.	M. Peet	883	2,036	93	62	1	7/1	3	111.80
Grace Hospital*	Detroit	E. S. Gurdjian	657	220	42	21	3	7/1	1	75.00
Henry Ford Hospital[a1]	Detroit	A. S. Crawford	436	2,384	28	8	3	7/1	2	200.00
University of Minnesota Hospitals[a1]	Minneapolis	W. T. Peyton	274	634	34	14	2	.....	3	.....
Mayo Foundation	Rochester, Minn.	W. McK. Craig	.....	.....	...	...	15	.....	3	92.50
Barnes Hospital*	St. Louis	H. Schwartz	503	.....	37	33	2	7/1	3	25.00
University of Nebraska Hospital[a1]	Omaha	J. J. Keegan	28	9	2	2	1	.....	2	.....

Numerical and other references will be found on page 225.

10. NEUROLOGICAL SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
Albany Hospital[a1]	Albany, N. Y.	E. H. Campbell	731	137	43	33	3	7/1	3	$ 41.67
Kings County Hospital[a1]	Brooklyn	E. J. Browder	3,220	1,747	303	181	3	7/1	3	80.00
Buffalo General Hospital*	Buffalo	W. B. Hamby	527	91	37	27	2	7/1	3	25.00
†Mount Sinai Hospital[a1]	New York City	I. Cohen	....	....	...	...	1	.....	1	50.00
Presbyterian Hospital[a1] (Neurological Institute)	New York City	J. E. Scarff	608	1,409	65	6	6	.....	3	41.66
†St. Vincent's Hospital[a1]	New York City		(Included in Neurology)				..	.....	2	.....
Strong Memorial and Rochester Municipal Hospitals[a1]	Rochester, N. Y.	W. P. Van Wagenen	300	189	...	...	1	.....	3	45.00
Duke Hospital[a1]	Durham, N. C.	B. Woodhall	829	1,522	49	26	4	7/1	3	83.33
Christ Hospital*	Cincinnati	F. H. Mayfield	248	(Included in Surgery)			1	8/1	1	75.00
Cincinnati General Hospital[a1]	Cincinnati		(Included in Surgery)				..	.....	3	.....
Cleveland Clinic Hospital [1]	Cleveland	W. J. Gardner	887	7,091	47	23	7	7/1	3	100.00
St. Vincents Hospital[a1]	Toledo, Ohio	M. T. Schnitker	357	236	23	18	1	7	1	100.00
University Hospitals*	Oklahoma City	H. Wilkins	133	466	26	13	2	7/1	1	35.00
†University of Oregon Medical School Hospitals and Clinics[a1, 28]	Portland, Ore.		31	.....	2	...	2	7/1	3	75.00
†Graduate Hospital of the University of Pennsylvania*	Philadelphia		354	409	43	26	2	7/1	2	.....
Hospital of the University of Pennsylvania[a1]	Philadelphia	F. G. Frant	830	253	59	51	5	7/1	3	50.00
Jefferson Medical College Hospital*	Philadelphia		....	.....	...	...	..	7/1	2	.....
Temple University Hospital[a1]	Philadelphia	M. Scott	619	1,307	45	16	1	7/1	2	.....
†Mercy Hospital[a1]	Pittsburgh, Pa.	F. H. Bragdon	388	123	14	4	1	9/1	1	100.00
Western Pennsylvania Hospital[a10]	Pittsburgh		....	....	...	...	..	.....	2	.....
Baptist Memorial Hospital*	Memphis, Tenn.	R. E. Semmes	994	542	40	20	1	7/1	2	75.00
Vanderbilt University Hospital[a1]	Nashville, Tenn.		(Included in Surgery)				..	.....	3	85.41
†University of Texas Medical Branch Hosps.[a1]	Galveston, Texas	S. R. Snodgrass	387	....	19	11	..	.....	2	.....
†Methodist Hospital[a1]	Houston, Texas	J. Greenwood	316	.....	9	7	1	11/1	1	75.00
University of Virginia Hospitals[a1]	Charlottesville, Va.	W. G. Crutchfield	713	504	45	28	2	7/1	3	.....
Medical College of Virginia, Hosp. Div.[a1]	Richmond, Va.	C. C. Coleman	1,062	521	67	33	3	7/1	3	46.50

11. NEUROLOGY

The following services are approved by the Council and the American Board of Psychiatry and Neurology Hospitals, 68; Assistant Residencies and Residencies, 170

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Length of Approved Program (years)	Beginning Stipend (Month)
United States Army										
†Letterman General Hospital*	San Francisco	E. B. Litteral	719	357	...	...	..	.....	3	n
†Fitzsimons General Hospital*	Denver, Colo.	D. B. Peterson	331	439	3	3	1	.....	2	n
Walter Reed General Hospital*	Washington, D. C.	J. Kemble	1,019	207	1	1	1	1, 7	1	n
United States Navy										
†U. S. Naval Hospital*	Bethesda, Md.	W. H. Boswell	1,321	379	10	8	1	Varies	3	n
†U. S. Naval Hospital[a2]	Philadelphia	E. L. Caveny	1,087	5,763	...	...	4	.....	2	n
Federal Security Agency										
†Freedmen's Hospital[a1]	Washington, D. C.	E. Y. Williams	153	1,263	4	1	1	7/1	2	n
Veterans Administration										
†Veterans Admin. Hospital [1]	Los Angeles, Calif.		217	312	12	6	..	.....	2	n
†Veterans Admin. Hospital [1]	Van Nuys, Calif.	H. H. De Jong	328	535	11	9	2	1/1, 7/1	3	n
Veterans Admin. Hospital [1]	Hines, Ill.	L. J. Pollack	766	.....	60	7	11	Varies	3	n
Veterans Admin. Hospital [1]	Topeka, Kans.	L. Berlin	396	.....	12	10	..	1/1	2	n
Veterans Admin. Hospital [1]	Louisville, Ky.	E. Roseman	994	9	...	...	2	.....	1	n
Veterans Admin. Hospital [1]	Framingham, Mass.		459	....	4	3	7	.....	3	n
Veterans Admin. Hospital	Minneapolis		621	.....	25	18	9	.....	3	n
Veterans Admin. Hospital	New York City	H. Flowers	796	202	34	14	7	1, 7	3	n
†Veterans Admin. Hospital [1]	Cleveland	L. Halle	399	200	15	5	1	7/1	2	n
†Veterans Admin. Hospital [1]	Coatesville, Pa.		....	.....	...	...	..	7/1	3	n
Nonfederal										
Los Angeles County Hospital[a1]	Los Angeles	S. D. Ingham	2,372	3,173	626	196	3	Varies	3	$165.00
†University of California Hospital[a1]	San Francisco	R. B. Aird	189	3,040	1	1	3	7/1, 8/1, 9/1	1	50.00
Gallinger Municipal Hospital[a1]	Washington, D. C.		759	.....	73	25	2	7/1	2	.....
George Washington University Hospital[a3]	Washington, D. C.	W. Freeman	104	249	...	...	..	.....	2	50.00
†Cook County Hospital[a1]	Chicago	J. A. Luhan	513	1,940	73	...	2	1, 7	1	32.00
†Illinois Neuropsychiatric Institute [1]	Chicago	E. Ohlberg	....	.....	...	...	..	.....	1	.....
St. Luke's Hospital*	Chicago	R. P. Mackay	....	470	...	...	2	7/1	2	25.00
University of Chicago Clinics[a1]	Chicago	R. B. Richter	146	2,395	7	4	..	7/1	2	25.00
†Methodist Hospital[a1]	Indianapolis	P. B. Reed	698	.....	22	11	2	7/1	1	200.00
University Hospitals[a2]	Iowa City	A. L. Sahs	1,245	696	21	14	3	7/1	3	50.00
Charity Hospital of Louisiana[a1, 5]	New Orleans		792	.....	24	9	1	7/1	3	25.00
†Ochsner Foundation Hospital [1, 41]	New Orleans, La.	T. L. L. Soniat	(Included in Psychiatry)				1	7/1	1	225.00
Baltimore City Hospitals[a1]	Baltimore	J. W. Magladery	....	.....	...	...	1	7/1	3	35.00
Boston City Hospital[a1]	Boston	D. E. Denney-Brown	174	3,957	12	4	..	.....	3	.....
Massachusetts General Hospital*	Boston	J. B. Ayer	309	....	29	21	..	.....	3	.....
†New England Center Hospital [1]	Boston	R. D. Adams	881	464	...	...	2	7/1	3	83.33
University Hospitals[a1]	Ann Arbor	C. Camp	582	3,823	26	18	4	7/1	3	111.80
Henry Ford Hospital[a1]	Detroit	G. O Grain	(Included in Psychiatry)				..	7/1	1	200.00
Wayne County General Hosp. and Infirmary[a1]	Eloise, Mich.	R. T. Costello	1,095	757	60	14	1	7/1	1	235.00
University of Minnesota Hospitals[a1]	Minneapolis	A. B. Baker	480	2,608	29	23	5	.....	3	.....
Mayo Foundation	Rochester, Minn.	H. W. Woltman	....	.....	...	...	15	.....	3	92.50
†Barnes Hospital*	St. Louis, Mo.	Wood and Gildea	362	.....	7	6	2	7/1	3	25.00
Homer G. Phillips Hospital[a1, 5]	St. Louis, Mo.	J. O'Leary	948	1,502	61	12	2	7/1	3	95.00
†St. Louis City Hospital[a1]	St. Louis, Mo.	J. O'Leary	382	1,119	...	...	..	7/1	2	95.00
†Albany Hospital[a1, 5]	Albany, N. Y.	S. E. Barrera	1,514	332	39	24	4	7/1	1	41.67

Numerical and other references will be found on page 225.

11. NEUROLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Fellowships Offered [4]	Beginning of Service (1946)	Length of Approved Program (years)	Beginning Stipend (Month)
Brooklyn Hospital[a1]	Brooklyn	E. J. Browder	290	.....	...	...	2	7/1	2	$ 25.00
†Jewish Sanitarium and Hospital for Chronic Diseases [1]	Brooklyn	A. M. Rabiner	371	.....	46	11	..	.....	1	150.00
Kings County Hospital[a1]	Brooklyn	H. Merwath	2,026	2,617	704	65	4	7/1	3	80.00
†Buffalo General Hospital[a]	Buffalo	W. B. Hamby	....	922	...	...	1	7/1	2	25.00
Bellevue Hospital, Div. II—Cornell Univ.[a1]	New York City	F. Kennedy	470	3,716	36	28	4	7/1	3	70.00
Bellevue Hospital, Div. III—N. Y. Univ.[a1, 13]	New York City		....	.....	...	...	..	.....	3	.....
†Fordham Hospital[a1]	New York City		....	.....	...	...	..	.....	1	.....
Goldwater Memorial Hospital[a1]	New York City	B. Dattner and E. G. Zabriskie	573	332	73	15	6	7/1	2	70.00
Lenox Hill Hospital[a1]	New York City	T. K. Davis	347	.....	14	4	1	1/1	2	50.00
Metropolitan Hospital[a1]	New York City	S. P. Jewett	133	1,306	17	3	1	7/1	2	130.00
Montefiore Hospital for Chronic Diseases[a1]	New York City		320	.....	38	13	6	7/1	3	50.00
Morrisania City Hospital[a1]	New York City	N. Savitsky	....	.....	...	...	2	7/1	2	80.00
Mount Sinai Hospital[a1]	New York City	I. S. Wechsler	....	.....	...	...	5	.....	3	50.00
New York City Hospital[a1]	New York City	L. V. Lyons	408	1,027	138	29	..	7/1	2	80.00
Presbyterian Hospital[a1]	New York City	H. H. Merritt	2,940	13,220	67	...	11	.....	3	41.66
†St. Vincent's Hospital[a1]	New York City	C. G. de Gutierrez-Mahoney	637	1,027	53	17	3	7/1	1	50.00
†Rochester General Hospital[a1]	Rochester, N. Y.		....	.....	...	...	..	.....	1	.....
Duke Hospital[a1]	Durham, N. C.	E. Kunkle	207	765	...	...	3	7/1	3	83.33
Cincinnati General Hospital[a1]	Cincinnati	C. Aring	351	1,608	132	55	5	7/1	3	50.00
†Cleveland Clinic Hospital [1]	Cleveland	L. J. Karnosh	118	7,437	...	...	5	7/1	2	100.00
†Graduate Hosp. of the Univ. of Pennsylvania*	Philadelphia		591	1,392	26	12	2	7/1	1	.....
Hospital of the University of Pennsylvania[a1]	Philadelphia	G. D. Gammon	834	2,863	15	10	4	7/1	3	50.00
Jefferson Medical College Hospital*	Philadelphia	B. J. Alpers	636	3,001	16	7	4	7/1	3	.....
†Philadelphia General Hospital[a1]	Philadelphia		1,921	.....	615	...	4	7/1	2	70.00
Temple University Hospital[a1]	Philadelphia	S. F. Gilpin	154	.....	6	1	..	.....	3	.....
†St. Francis Hospital[a1]	Pittsburgh	(Included in Psychiatry)							1	.....
†Galveston State Psychopathic Hospital (University of Texas Medical Branch)	Galveston, Texas		....	.....	...	...	..	.....	1	.....

12. OBSTETRICS AND GYNECOLOGY

The following services are approved by the Council and the American Board of Obstetrics and Gynecology Hospitals, 356; Assistant Residencies and Residencies, 1,355

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated OB	Inpatients Treated Gyn	Outpatient Visits OB	Outpatient Visits Gyn	Asst. Res. and Fellowships Offered [4]	Beginning of Service (1946)	Length of Approved Program (Years)	Beginning Stipend (Month)
United States Army											
Letterman General Hospital*	San Francisco	H. C. Boyd	OBG	809	392	10,536	1,130	2	.....	3	n
Fitzsimons General Hospital*	Denver	J. H. Forsee	OBG	1,702		12,735	2,480	3	.....	2	n
Walter Reed General Hospital*	Washington, D. C.	H. L. Riva and H. E. Harrison	OBG	1,275	578	8,554	9,032	6	1, 7	2	n
Brooke General Hospital*	San Antonio, Texas	J. W. Simpson	OBG	1,817	783	12,030	10,049	7	.....	3	n
United States Navy											
U. S. Naval Hospital*	Long Beach, Calif.	R. E. Crowder	OBG	1,579	750	13,142	7,282	5	Varies	3	n
U. S. Naval Hospital*	Oakland, Calif.	H. Hirshland	OBG	.....	.....	.....	.....	3	7	1	n
U. S. Naval Hospital*	San Diego, Calif.	H. H. Hill	OBG	1,932		15,072	10,046	5	.....	2	n
U. S. Naval Hospital*	Great Lakes, Ill.	L. M. Harris	OBG	637	320	5,903	3,822	4	Varies	3	n
U. S. Naval Hospital [1]	Annapolis, Md.	J. W. Miller	OBG	473	38	2,880	1,144	2	.....	1	n
U. S. Naval Hospital*	Bethesda, Md.	D. A. Callagan	OBG†	1,639	428	1,524	3,0.6	18	.....	3	n
U. S. Naval Hospital*	Chelsea, Mass.	F. B. Smith	OBG	.....	.....	.....	.....	1	.....	2	n
U. S. Naval Hospital	Brooklyn		OBG	.....	.....	.....	.....	1	.....	1	n
U. S. Naval Hospital*	Philadelphia	F. B. Smith	OBG	1,342		11,402		4	.....	3	n
U. S. Naval Hospital*	Portsmouth, Va.		OBG	4,382		53,663		4	.....	2	n
Federal Security Agency											
Freedmen's Hospital[a1]	Washington, D. C.	J. W. Ross	OBG	1,569	1,221	6,255	2,946	3	7/1	3	n
Nonfederal											
Carraway Methodist Hospital	Birmingham, Ala.	T. M. Boolware	OB	1,858		8,645		1	7	1	$100.00
Jefferson-Hillman Hospital[a1]	Birmingham, Ala.	W. N. Jones and J. R. Garber	OBG	3,758	1,631	10,189	5,491	6	.....	3	.....
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company*	Fairfield, Ala.	O. T. West	OB	2,173		13,457		3	7/1	2	225.00
St. Vincent Infirmary [1]	Little Rock, Ark.	C. P. Wickard and J. H. Sanderlin	OB†	2,100	.....	.....	.....	2	7/1	2	100.00
			Gyn†	.....	1,195	.....	.....	2	7/1	2	100.00
University Hospital[a1]	Little Rock, Ark.	E. Dodge	OBG	1,587	595	10,978	6,313	9	7/1	2	50.00
Herrick Memorial Hospital[a1]	Berkeley, Calif.	T. R. Hofmann	OBG	1,985	746	1,392	184	1	7/1	1	50.00
San Joaquin General Hospital[a1]	French Camp, Calif.	D. G. Harrington	OBG	1,629	296	.....	.....	1	1/1	2	210.00
California Hospital[a1]	Los Angeles	G. W. Hewlitt	OB	3,500		850		5	7/1	2	100.00
Los Angeles County Hospital[a1]	Los Angeles	B. J. Hanley	OBG	9,351	2,156	5,042	7,580	11	Varies	3	165.00
Queen of the Angeles Hospital*	Los Angeles		OBG	5,323	1,780	348	343	5	7/1	3	100.00
White Memorial Hospital[a1]	Los Angeles	R. J. Thompson	OBG	1,837	768	10,200	8,692	6	7/1	3	140.00
Highland-Alameda County Hospital[a1]	Oakland, Calif.	T. F. Bell	OBG	1,967	624	.....	.....	1	.....	3	100.00
Permanente Foundation Hospital[a1]	Oakland, Calif.	R. W. King	OBG	2,036	2,086	30,695		3	.....	2	.....
Samuel Merritt Hospital	Oakland, Calif.	C. C. Hall	OBG†	2,326	735	.....	.....	3	1/18	2	110.00
Collis P. and Howard Huntington Memorial Hospital*	Pasadena, Calif.		OB	806		.....	.....	1	7/1	1	.....
Mercy Hospital*	San Diego, Calif.	C. R. Kennedy	OB†	4,904		.....	.....	2	7/1	1	150.00
San Diego County General Hospital*	San Diego, Calif.	W. B. McGee	OBG†	726	469	2,806	1,358	2	7/1	1	125.00
Children's Hospital[a1]	San Francisco	H. A. Stephenson	OBG	2,880	657	2,504	979	4	7/1	3	50.00
Mary's Help Hospital[a1]	San Francisco	C. L. Cooley	OBG	1,856	542	9,887	1,066	2	.....	1	.....
St. Mary's Hospital*	San Francisco	P. H. Arnot	OB	.....	.....	.....	.....	1	7/1	1	100.00
San Francisco Hospital[a1]	San Francisco		OBG	2,197	710	.....	.....	4	.....	3	175.00

Numerical and other references will be found on page 225.

12. OBSTETRICS AND GYNECOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered*	Beginning of Service (Jan)	Length of Approved Program (Years)	Beginning Stipend (Month)
				OB	Gyn	OB	Gyn				
Stanford University Hospitals[a1]	San Francisco	C. E. McLennan	OBG	2,579	911	16,601		6	7/1	3	$ 50.00
University of California Hospital[a1]	San Francisco	H. F. Traut	OBG	1,131	810	6,823	7,012	5	7/1, 8/1, 9/1	3	50.00
Santa Clara County Hospital*	San Jose, Calif	A. Shufelt	OBG	802	472	2,527	3,641	2	7/1	2	225.00
St. John's Hospital*	Santa Monica, Calif	B. Watson	OBG	.....	.....	.....	.....	2	7	2	150.00
St. Joseph's Hospital*	Denver		OBG	2,624	886	.....	.....	1	7/1	2	85.00
University of Colorado Medical Center, Colorado General Hospital[a1]	Denver	E. S. Taylor	OBG	887	469	4,629	3,102	9	7/1	3	75.00
Denver General Hospital[a1,2a]	Denver	E. S. Taylor	OBG†	808	477	2,250	721	6	7	1	75.00
Bridgeport Hospital*	Bridgeport, Conn	C. Griswold	OB	3,002	.....	947	.....	2	7/1	1	100.00
Hartford Hospital*	Hartford, Conn	G. E. Howe	OBG	5,974	2,277	5,190	675	4	7/1	3	50.00
New Britain General Hospital[a1]	New Britain, Conn	D. A. Bristoll	OBG	1,930	908	.....	.....	1	7/1	1	75.00
Grace-New Haven Community Hospital											
Grace Unit*	New Haven, Conn	H. Perrins	OBG	2,187	602	.....	.....	3	7/1	3	52.00
New Haven Unit (University Service)[a1]	New Haven, Conn	H. Thoms	OBG	2,018	931	.....	9,305	8	7/1	3	40.00
Hospital of St. Raphael*	New Haven, Conn	C. E. Johnson	OB	.....	.....	.....	.....	3	7/1	1	75.00
Lawrence and Memorial Assoc. Hospitals[a1]	New London, Conn	E. H. Blank	OBG†	2,270	423	.....	.....	1	7/1	1	150.00
Columbia Hospital for Women and Lying-in Asylum	Washington, D. C.		OBG	4,187	1,674	9,950	4,690	8	7/1	3	.....
Doctors Hospital*	Washington, D. C.	J. D. Wynkoop	OBG	2,019	1,166	.....	.....	2	.....	2	.....
Gallinger Municipal Hospital[a1]	Washington, D. C.		OBG	6,055	629	5,006	2,832	6	7/1	3	100.00
Garfield Memorial Hospital[a1]	Washington, D. C.	R. J. Jansen and R. O'Donnell	OBG	3,191	1,354	5,281	1,919	6	.....	3	.....
Georgetown University Hospital[a1]	Washington, D. C.	A. A. Marchetti	OUG†	1,731	642	.....	.....	4	7	3	25.00
George Washington University Hospitals[a1]	Washington, D. C.	J. L. Parks	OBG	1,054	516	213	250	3	7/1	3	50.00
Providence Hospital*	Washington, D. C.	G. J. Ellis	OB(G)†	3,342	1,037	2,070	1,147	4	7/1	2	75.00
Sibley Memorial Hospital[a1]	Washington, D. C.	J. Kotz	OB	4,212	.....	29	.....	6	7/1	2	75.00
St. Luke's Hospital*	Jacksonville, Fla	S. R. Norris	OB	1,760	.....	5,220	.....	2	1/1, 7/1	1	125.00
Crawford W. Long Memorial Hospital[a1]	Atlanta, Ga	E. L. Griffin	OBG	5,831	1,339	2,019	142	11	7/1	2	75.00
Grady Memorial Hospital[a1]	Atlanta, Ga	J. B. Cross	OBG	6,036	810	33,637	10,320	11	7/1	3	.....
St. Joseph's Infirmary*	Atlanta, Ga	H. Boyd	OB	1,553	.....	2,742	.....	3	7/1	1	100.00
University Hospital[a1]	Augusta, Ga	R. Torpin	OBG	2,774	1,296	.....	.....	5	7/1	3	40.00
Augustana Hospital*	Chicago	W. H. Browne and N. P. Percy	OBG	1,121	1,045	1,520	1,247	2	7/1	1	50.00
Chicago Maternity Center	Chicago		OB	.....	.....	.....	.....	35	.....	1	.....
Cook County Hospital[a1]	Chicago	J. E. Fitzgerald	OB	11,809	.....	11,589	.....	12	1/1, 7/1	3	32.00
Frank Cuneo Memorial Hospital	Chicago		OBG	.....	.....	.....	.....	..	.....	1	.....
Grant Hospital[a1]	Chicago	M. H. Boley	OBG	1,709	785	.....	1,975	2	7/1	1	145.00
Henrotin Hospital[a1]	Chicago	E. L. Cornell	OB	707	.....	650	.....	1	.....	1	100.00
Hospital of St. Anthony de Padua*	Chicago		OB	.....	.....	.....	.....	..	.....	1	.....
Illinois Masonic Hospital[a1]	Chicago	Roos	OBG	1,354	633	.....	.....	1	.....	1	.....
Lewis Memorial Maternity Hospital[1]	Chicago	H. E. Schmitz	OBG	1,616	709	.....	.....	8	1/1, 7/1	3	50.00
Lutheran Deaconess Home and Hospital[a1]	Chicago		OB	1,724	.....	.....	.....	1	1	1	100.00
Mercy Hospital-Loyola University Clinics[a1]	Chicago	H. E. Schmitz	OBG	1,505	1,071	550	2,993	2	.....	3	25.00
Michael Reese Hospitals[a1]	Chicago	R. Reis	OBG	2,778	1,464	1,481	2,625	5	1/1, 7/1	3	25.00
Mount Sinai Hospital[a1]	Chicago	A. F. Lash and A. H. C. Goldfine	OBG	1,919	751	1,340	1,285	2	7/1	1	50.00
Passavant Memorial Hospital[a1]	Chicago	J. I. Brewer	Gyn	.....	658	.....	1,854	2	7/1	3	.....
Presbyterian Hospital*	Chicago	E. D. Allen	OBG	3,317	.....	.....	2,807	7	.....	3	25.00
Provident Hospital[a1]	Chicago	T. C. Raines and P. M. Santos	OBG	1,838	809	3,131	2,253	5	7/1	3	50.00
Ravenswood Hospital[a1]	Chicago	W. G. Rurik	OBG	1,758	587	646	354	3	Varies	2	60.00
Research and Educational Hospitals[a1]	Chicago	F. H. Falls	OB	980	.....	10,518	.....	5	7/1	3	55.00
St. Anne's Hospital[a1]	Chicago	R. J. Hawkins	OB	3,046	.....	.....	.....	3	1/1, 7/1	3	125.00
St. Elizabeth Hospital*	Chicago	J. B. Lavieri	OBG	3,119	724	.....	.....	4	1/1	1	60.00
St. Joseph Hospital*	Chicago	C. Geiger	OBG	1,338	742	966	610	2	5/1, 6/1	1	75.00
St. Luke's Hospital*	Chicago	E. A. Edwards and J. A. Gough	OBG	1,746	744	4,800	1,727	5	7/1	3	25.00
St. Mary of Nazareth Hospital*	Chicago	F. Mackowiak and M. E. Cmanski	OBG†	2,627	471	8,045	1,377	1	.....	1	100.00
St. Vincent's Infant and Maternity Hospital[1]	Chicago	H. E. Schmitz	OB	454	.....	2,541	.....	1	7/1	1	75.00
Swedish Covenant Hospital[a1]	Chicago	R. A. Lifvendahl and G. L. Rosene	OBG†	1,895	531	.....	.....	2	1/1, 7/1	1	125.00
University of Chicago Clinics[a1]	Chicago	W. J. Dieckmann	OBG	5,016	967	28,353	11,405	9	7/1	3	25.00
Wesley Memorial Hospital[a1]	Chicago	G. Gardner	OBG	1,338	1,173	.....	.....	4	.....	3	25.00
Women and Children's Hospital[a1]	Chicago	M. A. Phillips	OB	1,251	.....	997	.....	..	7/5	2	.....
Evanston Hospital*	Evanston, Ill.	Bonforth	OBG	1,531	912	1,039	754	4	.....	3	50.00
St. Francis Hospital*	Evanston, Ill.	J. X. Bremner	OBG	2,648	807	.....	.....	1	7/1	3	75.00
Little Company of Mary Hospital*	Evergreen Park, Ill.	P. Lawler	OB	3,200	.....	.....	.....	3	7/1	2	100.00
West Suburban Hospital*	Oak Park, Ill.		OBG	3,713	1,126	12	291	3	7	2	150.00
St. Francis Hospital[a1]	Peoria, Ill.	W. A. Michael	OBG	3,151	788	303	313	2	4, 9	2	150.00
Indianapolis General Hospital[a1]	Indianapolis	J. W. Hofmann and F. J. Hudson	OBG	1,523	976	8,536	3,741	3	7/1	3	80.00
Indiana University Medical Center[a1]	Indianapolis	C. Huber	OB	1,882	.....	3,777	.....	3	7/1	3	68.33
Methodist Hospital[a1]	Indianapolis	L. J. Clark	OB	5,248	.....	.....	.....	3	7/1	2	200.00
St. Vincent's Hospital[a1]	Indianapolis	C. Habich	OBG†	3,322	1,299	402	150	2	7/1	2	200.00
St. Elizabeth Hospital*	La Fayette, Ind.	F. W. Peyton	OBG†	1,632	561	.....	.....	4	7/1	2	100.00
University Hospitals[a1]	Iowa City	E. D. Plass	OBG	1,307	1,080	1,525	2,243	9	7/1	3	100.00
University of Kansas Medical Center[a1]	Kansas City, Kan	L. A. Calkins	OBG	1,106	589	5,757	3,782	6	.....	3	.....
St. Francis Hospital*	Wichita, Kan	R. A. West	OBG	2,452	1,105	.....	.....	2	7/1	3	125.00
St. Joseph's Hospital*	Lexington, Ky	A. B. Barrett	OBG	4,492		.....	.....	1	7/1	1	90.00
Louisville General Hospital*	Louisville, Ky	W. O. Johnson and S. H. Starr	OBG	2,009	424	10,888	6,256	8	7/1	3	45.00
St. Joseph Infirmary*	Louisville, Ky	E. R. Cadden	OBG	2,527	1,258	.....	819	3	7/1	2	75.00
Charity Hospital of Louisiana[a1]	New Orleans		OBG	11,636	3,370	53,778	29,317	26	7/1	3	25.00
Hotel Dieu, Sisters' Hospital[a1]	New Orleans	W. D. Beacham	OBG	2,734	853	.....	.....	2	7/1	1	100.00
Southern Baptist Hospital[a1]	New Orleans	T. B. Sellers	OBG	3,569	1,856	.....	.....	2	7/1	1	150.00
Touro Infirmary*	New Orleans	W. E. Levy	OB	2,409	.....	5,184	.....	..	.....	..	.....
		C. Tyrone	Gyn	.....	1,518	.....	2,097	5	.....	3	17.50
Shreveport Charity Hospital*	Shreveport, La	C. R. Mays	OB†	3,033	.....	.....	.....	3	7/1	1	.....
Baltimore City Hospitals[a1]	Baltimore	L. H. Douglass	OB	2,133	.....	.....	.....	3	7/1	3	15.00
Bon Secours Hospital*	Baltimore	E. Novak and H. B. McNally	OBG†	1,135	842	530	550	3	7/1	1	75.00
Franklin Square Hospital[a1]	Baltimore	W. J. Rysanek, Jr. and I. A. Siegel	OB(G)†	1,701	235	1,321	641	4	7/1	1	85.00
Hospital for Women*	Baltimore	J. Bergland	OB	1,855	.....	3,420	.....	3	7/1	1	75.00

Numerical and other references will be found on page 225.

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12. OBSTETRICS AND GYNECOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered*	Beginning of Service (1946)	Length of Approved Program (Years)	Beginning Stipend (Month)
				OB	Gyn	OB	Gyn				
Johns Hopkins Hospital*	Baltimore	N. J. Eastman	OB	3,158	.....	14,755	.....	8	.....	..	.....
		R. W. Te Linde	Gyn	.....	2,403	.....	12,871	7	7/1	3	$ 41.66
Maryland General Hospital[a1]	Baltimore	E. H. Kloman and K. B. Boyd	OBG	1,197	447	531	71	3	7/1	2	50.00
Mercy Hospital*	Baltimore	T. K. Galvin and E. P. Smith	OBG	1,607	963	2,981	829	4	7/1	3	50.00
Provident Hospital and Free Dispensary*[1]	Baltimore	L. H. Douglas	OB	.....	.....	.....	.....	1	.....	1	.....
St. Agnes Hospital*	Baltimore	H. B. McNally and E. Novack	OBG†	1,392	803	496	117	4	.....	1	.....
St. Joseph's Hospital*	Baltimore	T. K. Galvin and H. B. McNally	OBG	1,651	968	3,054	1,149	3	7/1	3	50.00
Sinai Hospital[a1]	Baltimore	A. P. Guttmacher	OB	2,718	.....	.....	.....	4	.....	2	.....
		D. Silverman	Gyn	.....	999	.....	.....	4	7/1	1	25.00
South Baltimore General Hospital[a1]	Baltimore	F. Kaltreider	OB†	1,108	.....	1,603	.....	2	6/1	1	75.00
Union Memorial Hospital*	Baltimore	J. M. Haws	OB	2,563	.....	2,763	.....	3	.....	1	.....
University Hospital[a1]	Baltimore	L. H. Douglass	OB	2,765	.....	17,949	.....	6	.....	..	.....
		J. M. Hundley, Jr.	Gyn	.....	968	.....	7,555	4	7/1	3	.....
West Baltimore General Hospital*[1]	Baltimore	D. McC. Dixon and W. K. Diehl	OBG†	2,128	671	2,542	227	2	.....	1	.....
Boston City Hospital*[a]	Boston	F. J. Lynch and F. L. Good	OBG	3,044	2,166	11,040	7,003	2	.....	3	.....
Boston Lying-In Hospital [24]	Boston	D. E. Reid	OB	3,512	.....	29,432	.....	10	1/1	3	.....
Carney Hospital*	Boston		OBG	1,164	819	2,713	859	3	7	3	.....
Massachusetts Memorial Hospitals*[1]	Boston	C. W. Sewall	OB	1,030	.....	3,346	.....	2	1/1	2	75.00
New England Hosp. for Women and Children*[1]	Boston	M. Woodman	OB†	2,186	.....	6,161	.....	1	1/1	1	50.00
Booth Memorial Hospital	Brookline, Mass.	S. Finke	OB	1,162	.....	3,844	.....	2	4/1, 7/1	1	66.66
Free Hospital for Women	Brookline, Mass.	G. Van S. Smith	Gyn	.....	3,093	.....	12,555	6	1/1	3	.....
Cambridge City Hospital*	Cambridge, Mass.	F. J. Lynch	OBG	1,525	587	2,195	360	1	7/1	2	58.33
Quincy City Hospital*	Quincy, Mass.	L. H. VanRaalte	OBG†	1,804	792	.....	.....	2	.....	1	100.00
St. Joseph's Mercy Hospital*	Ann Arbor, Mich.	H. H. Cummings	OBG†	.....	2,458	.....	.....	2	7/1	1	125.00
University Hospital*[1]	Ann Arbor, Mich.	C. Miller	OBG	1,065	842	5,779	6,726	7	7/1	3	111.90
City of Detroit Receiving Hospital*[1]	Detroit	C. S. Stevenson	OBG	183		5,819		2	7/15	3	188.00
Evangelical Deaconess Hospital*	Detroit		OBG	.....	.....	.....	.....	..	.....	1	.....
Florence Crittenton Hospital [1]	Detroit	H. A. Pearse	OBG	2,174	808	4,033	704	7	7/1	3	.....
Grace Hospital[a1]	Detroit	O. W. Packard	OBG	.....	8,839	.....	2,121	8	7/1	3	75.00
Harper Hospital*[1]	Detroit	A. E. Catherwood	OBG	2,986	1,334	401	2,295	5	7/1	3	.....
Henry Ford Hospital*[1]	Detroit	J. P. Pratt	OBG	2,208	1,026	10,546	24,957	4	7/1	3	200.00
Herman Kiefer Hosp.tal [1]	Detroit	C. S. Stevenson	OBG	3,388	.....	.....	.....	2	7/15	3	200.00
Mt. Carmel Mercy Hospital*[1]	Detroit	C. N. Swanson	OBG	4,781	.....	.....	.....	5	7/1	2	150.00
Providence Hospital*	Detroit	H. Henderson	OBG	4,632	1,404	.....	.....	7	7/1	3	140.00
St. Joseph's Mercy Hospital*[1]	Detroit	R. B. Kennedy	OB	1,950		836		2	.....	..	150.00
		R. B. Kennedy	Gyn	.....	1,207	.....	146	1	.....	2	150.00
St. Mary's Hospital*	Detroit	V. J. Turcotte	OBG	1,994	956	.....	.....	5	7/1	3	125.00
Woman's Hospital*[1]	Detroit	L. E. Daniels and H. M. Nelson	OBG	4,461	1,477	.....	.....	5	7/1	3	125.00
Hurley Hospital*	Flint, Mich.	M. Burnell	OBG†		2,381	.....	.....	1	7/1	1	135.00
Blodgett Memorial Hospital*[1]	Grand Rapids, Mich.	P. W. Willits	OB†	1,722	.....	.....	.....	1	.....	1	100.00
Butterworth Hospital*[1]	Grand Rapids, Mich.	L. C. Bosch	OBG†	2,870	1,352	521	312	4	7/1	2	100.00
St. Mary's Hospital*	Grand Rapids, Mich.	J. H. Benton	OBG	2,956	580	22	22	2	4/1	1	125.00
Pontiac General Hospital*[1]	Pontiac, Mich.	H. Furlong	OB	.....	.....	.....	.....	3	7/1	1	75.00
Saginaw General Hospital*[1]	Saginaw, Mich.	C. E. Toshach	OBG	1,862	.....	416	.....	3	7/1	3	75.00
St. Luke's Hospital*	Duluth, Minn.		OB†	.....	.....	.....	.....	1	.....	1	.....
St. Mary's Hospital*	Duluth, Minn.	A. O. Swenson	OB	1,425	.....	.....	.....	1	.....	2	.....
Abbott Hospital*	Minneapolis		OBG	.....	.....	.....	.....	2	.....	1	.....
Maternity Hospital [1]	Minneapolis	A. Arnold	OB	2,649	.....	3,125	.....	2	.....	1	195.00
Minneapolis General Hospital*[1]	Minneapolis	L. A. Lang	OBG	729	479	2,283	2,232	2	1/1, 7/1	3	115.00
Northwestern Hospital*[1]	Minneapolis	B. Dornbalser	OBG†	2,043	867	.....	.....	2	7/1	1	150.00
St. Barnabas Hospital*[1]	Minneapolis		OBG	2,175	588	.....	.....	1		2	.....
St. Mary's Hospitals*[1]	Minneapolis	L. A. Lang	OBG(J)†	3,676	1,091	.....	.....	2	7/1, 1/1	1	.....
Swedish Hospital*	Minneapolis	Maland	OB	2,830	.....	.....	.....	1	.....	1	.....
University of Minnesota Hospitals*[1]	Minneapolis	J. McKelvey	OBG	408	383	1,099	2,018	7	.....	3	.....
Mayo Foundation	Rochester, Minn.	L. M. Randall	OBG	.....	.....	.....	.....	12	.....	3	92.50
Ancker Hospital*	St. Paul	A. G. Schulze	OBG	321	215	802	1,346	1	1	3	91.50
Charles T. Miller Hospitals*[1, 24]	St. Paul	R. S. Countryman and E. C. Hartley	OBG	2,166	714	1,948	908	1	.....	3	115.00
St. Louis County Hospital*	Clayton, Mo.	E. L. Dorsett	OBG	655	340	3,399	2,553	2	7/1	3	80.00
Kansas City General Hospital No. 1*	Kansas City, Mo.	G. F. Pendleton	OBG	993	739	3,601	3,497	4	7	3	50.00
St. Joseph Hospital*	Kansas City, Mo.		OBG†	1,955	1,338	.....	.....	2	.....	1	.....
DePaul Hospital*	St. Louis	L. M. Riordan	OBG†	2,562	412	276		3	7/1	2	90.00
Homer G. Phillips Hospital*[1]	St. Louis	K. C. Morrin	OBG	2,429	1,378	.....	7,419	8	.....	3	95.00
Jewish Hospital*[1]	St. Louis		OBG	1,430	895	.....	.....	2	7	3	50.00
Missouri Baptist Hospital*	St. Louis	J. B. O'Neill	OBG†	1,243	540	.....	.....	2	7/1	1	70.00
St. Louis City Hospitals*[1]	St. Louis	O. Schwarz, J. Hardy and T. R. Ayars	OBG	1,244	909	2,096	2,805	6	7/1	3	95.00
St. Louis Maternity Hospital [1]	St. Louis	W. Allen	OBG	3,748	1,195	9,550	7,742	15	7/1	3	25.00
St. Luke's Hospitals*[1]	St. Louis	R. Paddock	OBG	1,166	613	.....	.....	2	7/1	2	50.00
St. Mary's Group of Hospitals*	St. Louis	J. A. Hardy, Jr.	OBG	4,422	1,531	6,507	3,722	8	7/1	3	85.00
Montana Deaconess Hospital	Great Falls, Mont.	F. L. McPhail	OBG†	940	324	.....	.....	1	7/1	1	200.00
Lincoln General Hospital*[1]	Lincoln, Nebr.		OBG†	.....	.....	.....	.....	1	.....	1	.....
Creighton Memorial St. Joseph's Hospital*[1]	Omaha	M. E. Grier	OBG	2,320	1,550	.....	.....	3	1/1	3	100.00
University of Nebraska Hospital*[1]	Omaha	E. C. Sage	OBG	267	508	478	2,313	2	7/1	3	75.00
Cooper Hospital*	Camden, N. J.	A. B. Davis and G. B. German	OB(G)†	3,553		10,070		3	11/1	2	83.31
Jersey City Hospital*[1]	Jersey City, N. J.	E. W. Bookrajian	Gyn	.....	856	.....	5,710	2	.....	3	.....
Margaret Hague Maternity Hospital [1]	Jersey City, N. J.	S. A. Cosgrove	OB	10,921	.....	20,431	.....	16	.....	3	66.66
Monmouth Memorial Hospital*[1]	Long Branch, N. J.	R. A. McKenzie	OB	1,936	.....	764	.....	2	.....	2	150.00
Paterson General Hospital*[1]	Paterson, N. J.	L. E. Peters	OB	2,385	.....	874	.....	1	.....	1	.....
Albany Hospital*[1]	Albany, N. Y.	A. J. Wallingford	Gyn	.....	2,745	.....	672	3	7/1	2	41.67
Anthony N. Brady Maternity Home	Albany, N. Y.		OB	.....	.....	.....	.....	1	7/1	2	40.00
Beth-El Hospital*	Brooklyn	A. Koplowitz	OBG	3,830	.....	2,724	.....	3	1, 7	2	100.00
Brooklyn Hospital*[1]	Brooklyn	J. T. Wallace	OBG	2,162	597	4,056	1,788	2	7/1	3	25.00
Brooklyn Women's Hospital	Brooklyn	A. Koplowitz	OBG†		1,927		2,907	3	8/1	1	75.00
Cumberland Hospital*[1]	Brooklyn	S. Lubin	OBG	1,672	499	6,899	2,235	4	7/1	3	70.00
Greenpoint Hospital*[1]	Brooklyn	W. C. Meagher	OBG	1,315	847	5,271	5,714	2	7/1	2	130.00
Jewish Hospital*[1]	Brooklyn		OBG	.....	1,673	.....	2,815	8	7	3	80.00
Kings County Hospital*[1]	Brooklyn	R. Garlick and C. Gordon	OBG	4,825	3,583	19,871	5,686	5	7/1	3	130.00
Long Island College Hospital*	Brooklyn	F. P. Light	OBG	2,006	1,089	3,967	2,006	3	7/1	3	25.00

Numerical and other references will be found on page 225.

12. OBSTETRICS AND GYNECOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Fellowships Offered	Beginning of Service (1950)	Length of Approved Program (Years)	Starting Stipend (Month)
				OB	Gyn	OB	Gyn				
Methodist Hospital[a1]	Brooklyn	Acken and S. C. Hall	OBG	2,703	790	8,205	831	8	7/1	3	$ 25.00
Norwegian Lutheran Deaconesses' Home and Hospital[a1]	Brooklyn	B. Harris	OB	1,736	.....	3,051	.....	2	7/1	1	35.00
St. Catherine's Hospital[a1]	Brooklyn	C. A. Gordon	OBG†	2,042	712	2,958	467	3	7/1	1	75.00
St. John's Hospital[a1]	Brooklyn	C. W. Mueller	OBG	941	338	.....	.....	3	7/1	3	95.00
St. Mary's Hospital[a1]	Brooklyn	H. J. Goubeaud, Jr.	OBG	1,994	611	4,549	1,225	3	7/1	2	50.00
Unity Hospital[a]	Brooklyn	S. L. Siegler	OBG†	.....	2,674	968	.....	4	7/1	2	100.00
Buffalo General Hospital[a1]	Buffalo	C. L. Randall	OBG	1,557	1,005	3,121	1,824	9	7/1	3	25.00
Children's Hospital	Buffalo	E. G. Winkler	OB	2,927	.....	.....	.....	2	.....	2	.....
Edward J. Meyer Memorial Hospital[a1]	Buffalo	E. G. Winkler	OBG	904	622	3,981	2,074	4	7/1	3	100.00
Millard Fillmore Hospital[a]	Buffalo	L. F. McLean	OB	3,906	.....	.....	.....	4	7/1	3	50.00
		L. F. McLean	Gyn	.....	1,761	.....	.....	..	.....	..	.....
Sisters of Charity Hospital[a]	Buffalo	E. G. Winkler	OB	3,978	.....	.....	.....	3	7/1	3	150.00
Queens General Hospital[a1]	Jamaica, N. Y.	E. A. Flemming	OBG	1,978	1,057	6,078	2,956	3	7/1	2	80.00
Nassau Hospital	Mineola, N. Y.		OB	.....	.....	.....	.....	..	.....	1	.....
Bellevue Hospital, Div. III—N. Y. Univ.[a1]	New York City	W. Studdiford	OBG	2,872	2,234	15,397	7,038	5	.....	3	60.00
Beth Israel Hospital[a1]	New York City	H. C. Falk	OBG	2,996	.....	4,316	.....	2	7/1	..	50.00
		H. C. Falk	Gyn	.....	1,047	.....	3,527	3	7/1	1	50.00
Bronx Hospital[a1]	New York City	M. Rosensohn	OB†	3,059	3,790	.....	.....	2	7/1	1	75.00
Flower and Fifth Avenue Hospitals[a1]	New York City	L. S. Lolzeaux	OBG	2,039	1,389	4,705	1,448	2	7/1	3	.....
Fordham Hospital[a1]	New York City	M. L. Brandt	OBG	1,101	503	5,065	1,533	3	1/1, 7/1	2	130.00
French Hospital[a1]	New York City	.....	OB	1,374	.....	712	.....	2	7/1	2	83.33
Harlem Hospital[a1]	New York City	F. A. Kassebohm	OB	5,076	.....	25,336	.....	3	7, 1	3	80.00
		H. C. Falk	Gyn	.....	2,009	.....	10,743	3	7, 1	..	80.00
Hospital for Joint Diseases[a1]	New York City	H. Davidson	Gyn†	.....	485	.....	2,785	1	7/1	1	40.00
Lenox Hill Hospital[a1]	New York City	J. Kilroe and R. C. Van Etten	OB(G)†	1,775	853	.....	.....	3	7/1	2	50.00
Lincoln Hospital[a1]	New York City	H. C. Ingraham	OBG	2,418	1,253	12,185	4,663	6	.....	2	.....
Metropolitan Hospital[a1]	New York City	H. B. Safford	OBG	1,982	1,182	9,947	4,867	3	7/1	2	80.00
Misericordia Hospital[a]	New York City	A. H. Schmitt	OB	.....	.....	.....	.....	1	2/1	1	.....
Morrisania City Hospital[a1]	New York City	M. Goodfriend	OB	2,900	.....	8,446	.....	3	7/1	2	60.00
Mount Sinai Hospital[a1]	New York City	M. A. Goldberger	Gyn	.....	.....	.....	.....	4	.....	2	50.00
New York City Hospital[a1]	New York City	R. J. Lowrie and J. V. Ried	OBG	1,590	1,056	10,697	3,756	3	7/1	2	80.00
New York Hospital[a]	New York City	G. Douglas	OBG	7,339	.....	27,021	14,074	14	7/1	3	25.00
New York Infirmary[a]	New York City	W. Ragland	OB	1,251	.....	4,041	.....	2	.....	2	75.00
New York Polyclinic Medical School and Hosp.[a]	New York City	.....	OB	1,285	.....	2,787	.....	..	.....	..	.....
		.....	Gyn	.....	1,131	.....	3,373	2	7/1	2	50.00
Presbyterian Hospital[a1]	New York City	H. C. Taylor, Jr.	OBG	4,389	1,535	19,967	12,783	17	.....	3	41.66
Roosevelt Hospital[a1]	New York City	T. C. Peightal	Gyn	.....	1,020	.....	2,664	1	.....	2	.....
St. Clare's Hospital[a1]	New York City	M. Jordan	OBG	1,738	458	3,411	983	6	7/1	3	25.00
St. Francis Hospital[a1]	New York City	J. Labate	OBG	.....	2,685	.....	4,492	5	.....	2	75.00
St. Vincent's Hospital[a1]	New York City	J. F. McGrath	OBG	2,060	960	4,806	3,031	3	7/1	2	50.00
University Hospital[a1]	New York City	W. T. Dannreuther	Gyn	.....	682	.....	11,783	2	10/1	2	30.00
Woman's Hospital[1]	New York City	A. H. Aldidge	OBG	3,227	2,494	11,430	19,617	11	.....	3	10.00
Genesee Hospital[a]	Rochester, N. Y.	S. R. Snow, Jr.	OB†	1,537	.....	855	.....	3	7	1	41.66
Highland Hospital[a1]	Rochester, N. Y.	J. B. Loder	OB	.....	.....	.....	.....	2	7/1	1	100.00
Rochester General Hospital[a1]	Rochester, N. Y.	M. Wilkinson	OB	2,734	.....	2,055	.....	1	7/1	3	70.00
Strong Memorial and Rochester Municipal Hospitals[a1]	Rochester, N. Y.	K. M. Wilson	OBG	2,158	1,347	3,177	3,281	6	7/1	3	45.00
Ellis Hospital[a1]	Schenectady, N. Y.	W. Mullin	OB	1,925	.....	.....	.....	1	.....	1	100.00
General Hospital[a]	Syracuse, N. Y.	R. J. Pieri	OB	.....	.....	1,552	.....	..	.....	..	.....
		R. J. Pieri	Gyn	1,723	368	.....	166	2	7	1	35.00
Syracuse Memorial Hospital[a]	Syracuse, N. Y.	E. C. Hughes and C. E. Clark	OB	2,569	.....	1,253	.....	3	7/1	..	.....
		.....	Gyn	.....	1,189	.....	1,748	5	7/1	3	125.00
Charlotte Memorial Hospital[a]	Charlotte, N. C.	J. L. Frowell	OBG	1,484	822	777	610	1	.....	1	.....
Duke Hospital[a1]	Durham, N. C.	B. Carter	OBG	1,735	1,133	7,418	8,170	12	7/1	3	83.33
Watts Hospital[a1]	Durham, N. C.	.....	OBG†	1,665	710	712	3,865	1	7/1	1	75.00
James Walker Memorial Hospital[a1]	Wilmington, N. C.	.....	OB	2,238	.....	2,203	.....	1	.....	1	.....
North Carolina Baptist Hospital[a1]	Winston-Salem, N. C.	F. Lock	OBG	1,439	578	1,534	1,765	1	7/1	3	.....
City Hospital[a]	Akron, Ohio	.....	OB	5,180	.....	1,959	.....	4	7/1	2	100.00
Peoples Hospital[a1]	Akron, Ohio	L. DaSef	OB	2,937	.....	567	.....	5	7/1	1	100.00
St. Thomas Hospital[a]	Akron, Ohio	H. H. Kingler	OBG	.....	.....	.....	.....	2	7/1	2	125.00
Aultman Hospital[a1]	Canton, Ohio	H. I. Keck	OBG	3,268	589	29	6	5	7/1	1	75.00
Mercy Hospital[a]	Canton, Ohio	R. K. Ramseyer and L. E. Leavenworth	OBG	2,792	910	12	.....	4	7/1	1	100.00
Bethesda Hospital[a1]	Cincinnati	R. D. Bryant and G. B. Haydon	OBG	2,888	879	800	33	5	7/1	3	150.00
Cincinnati General Hospital[a1]	Cincinnati	S. Garber	OB	3,624	.....	7,121	.....	5	7/1	3	.....
City Hospital[a1]	Cleveland	M. Black	OBG	1,579	.....	2,699	.....	4	7/1	3	60.00
Fairview Park Hospital[a1]	Cleveland	C. D. Saunders	OB	2,603	.....	40	.....	2	7/1	2	75.00
Lutheran Hospital[a]	Cleveland	R. S. Dial	OB	1,690	.....	.....	.....	2	7/1	1	75.00
Mount Sinai Hospital[a1]	Cleveland	J. L. Bubis	OB	2,324	.....	855	.....	..	.....	..	.....
		J. L. Bubis	Gyn	.....	1,164	.....	559	3	7/1	3	100.00
St. Ann's Maternity Hospital	Cleveland	H. C. Wise	OB	2,140	.....	648	.....	2	.....	1	.....
St. John's Hospital[a1]	Cleveland	J. V. Heimann	OBG	2,339	.....	68	.....	3	7/1	2	.....
St. Luke's Hospital[a]	Cleveland	C. T. Hemmings	OBG	3,032	880	2,622	1,495	4	6/25	3	60.00
University Hospitals[a1]	Cleveland	M. E. Black	OB	4,995	.....	20,859	.....	7	.....	..	.....
		R. L. Faulkner	Gyn	.....	2,039	.....	6,453	7	7/1	3	25.00
Mount Carmel Hospital[a1]	Columbus, Ohio	.....	OB	.....	.....	.....	.....	..	.....	2	.....
Ohio State University Hospital[a1]	Columbus, Ohio	A. C. Barnes	OBG	1,839	938	8,049	3,881	6	7/1	3	50.00
St. Ann's Maternity Hospital	Columbus, Ohio	R. E. Krigbaum	OB†	.....	.....	.....	.....	2	.....	2	.....
White Cross Hospital[a1]	Columbus, Ohio	W. Silbernagel	OB	4,291	.....	.....	.....	3	7	2	100.00
Miami Valley Hospital[a]	Dayton, Ohio	J. K. Hoerner	OB	4,364	.....	.....	.....	1	7/1	1	75.00
Lakewood Hospital[a]	Lakewood, Ohio	R. Wylie	OB	1,436	.....	18	.....	1	7/1	1	100.00
Maumee Valley Hospital[a]	Toledo, Ohio	.....	OBG	434	432	225	417	2	7	1	125.00
Mercy Hospital[a]	Toledo, Ohio	R. C. King	OBG	2,931	1,076	256	160	4	7/1	2	110.00
St. Vincent's Hospital[a1]	Toledo, Ohio	M. W. Diethelm	OB	1,873	.....	79	.....	1	7	1	100.00
Toledo Hospital[a]	Toledo, Ohio	M. D. Haag	OBG	2,540	759	1,008	147	3	.....	3	.....
St. Elizabeth's Hospital[a1]	Youngstown, Ohio	A. J. Brandt	OBG	2,868	1,044	73	246	2	7/1	2	125.00
University Hospitals[a]	Oklahoma City	J. B. Eskridge, Jr. and G. Penick	OBG	1,316	457	5,695	3,907	3	7/1	3	35.00
Wesley Hospital[a]	Oklahoma City	J. W. Records	OBG†	1,347	1,310	.....	.....	1	7/1	1	150.00
St. John's Hospital[a1]	Tulsa, Okla.	C. Simpson	OB	2,737	.....	.....	.....	1	.....	1	150.00
Emanuel Hospital[a1]	Portland, Ore.	C. Fearl	OBG	4,567	1,859	.....	.....	3	7/1	3	75.00
Good Samaritan Hospital[a]	Portland, Ore.	K. J. Scales	OB	3,229	.....	.....	.....	1	7/1	1	75.00

Numerical and other references will be found on page 225.

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12. OBSTETRICS AND GYNECOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered *	Beginning of Service (1940)	Length of Approved Program (Years)	Beginning Stipend (Month)
				OB	Gyn	OB	Gyn				
St. Vincent's Hospital[a]*	Portland, Ore.		OB	.....	.....	.....	.....	1	.....	1	.....
University of Oregon Medical School Hospitals and Clinics[a]	Portland, Ore.	H. C. Stearns	OBG	.....	495	.....	2,159	5	7/1	3	$ 75.00
Abington Memorial Hospital[a]*	Abington, Pa.		OBG	1,706	682	1,858	669	1	7/1	2	50.00
St. Luke's Hospital[a,b]	Bethlehem, Pa.	T. E. Schadt	OBG†	1,800	.....	289	.....	2	7/1	1	100.00
Bryn Mawr Hospital*	Bryn Mawr, Pa.	C. A. Behney	OBG	242	113	.....	.....	1	7/1	1	75.00
George F. Geisinger Memorial Hospital*	Danville, Pa.	R. E. Nicodemus	OB	1,303	.....	9,828	.....	2	7/1	1	75.80
Harrisburg Hospital[a]	Harrisburg, Pa.	W. P. Dailey	OB	2,329	.....	2,295	.....	2	7/1	1	100.00
Episcopal Hospital[a,b]	Philadelphia	J. H. Dugger	OBG	2,934	975	6,589	1,159	4	7/1	3	50.00
Germantown Dispensary and Hospital*	Philadelphia	Z. B. Newton	OB†	2,129	.....	3,451	.....	1	7	1	50.00
Graduate Hosp. of the Univ. of Pennsylvania*	Philadelphia		Gyn	.....	708	.....	1,602	2	7/1	3	.....
Hahnemann Hospital[a]	Philadelphia	N. F. Paxson and B. V. MacFayden	OBG	3,379	1,417	9,887	3,176	5	.....	2	25.00
Hospital of the University of Pennsylvania[a,b]	Philadelphia	C. Bachman and F. W. Payne	OBG	1,835	1,874	8,290	4,297	7	7, 3, 9	3	50.00
Hospital of the Women's Medical College of Pennsylvania*	Philadelphia	A. G. Taylor M. DeW. Pettit	OB Gyn	1,676	 755	7,153	 3,510	2 3	7/1 7/1	3 2	..... 60.00
Jefferson Medical College Hospital*	Philadelphia	L. C. Sheffey	OBG	2,722	2,223	11,472	6,375	8	7/1	3	.....
Jewish Hospital[a]	Philadelphia		Gyn	1,750	1,276	714	400	1	7	1	.....
Lankenau Hospital*	Philadelphia	R. B. Wilson	OB†	1,136	.....	.....	.....	2	7/1	2	50.00
Mount Sinai Hospital[a,b]	Philadelphia		OBG	1,432	596	1,440	949	2	6/21	3	50.00
Pennsylvania Hospital*	Philadelphia	C. B. Lull	OBG	3,402	1,523	3,622	14,114	6	1/1	3	50.00
Philadelphia General Hospital[a,b]	Philadelphia		OBG	.....	1,871	.....	.....	6	7/1	3	70.00
Temple University Hospital[a,b]	Philadelphia	J. R. Willson	OBG	2,474	1,109	4,570	2,084	7	7/1	3	.....
Woman's Hospital[a]	Philadelphia		OB	2,069	.....	6,068	.....	2	7/1	..	50.00
			Gyn	.....	667	.....	1,496	1	7/1	1	50.00
Elizabeth Steel Magee Hospital [1]	Pittsburgh	C. J. Barone and B. Z. Cashman	OBG	5,005	2,262	3,710	1,261	10	7/1	3	41.67
Mercy Hospital[a]	Pittsburgh	R. A. D. Gillis and R. J. Frodey	OBG†	2,399	839	625	814	2	9/1	2	100.00
Montefiore Hospital*	Pittsburgh	H. Cohen and S. Goldstein	OBG	1,273	686	1,355	1,318	2	7/1	1	50.00
Pittsburgh Hospital[a]	Pittsburgh	E. A. Conti and T. Evans, Jr.	OBG†	1,300	700	538	237	1	1/1	1	100.00
St. Francis Hospital[a,b]	Pittsburgh		OB	.....	.....	.....	.....	..	.....	..	.....
			Gyn	1,940	895	507	483	3	7/1	3	100.00
St. Margaret Memorial Hospital[a,b]	Pittsburgh	P. Titus	OBG†	633	479	260	177	1	7/1	1	100.00
Wilkes-Barre General Hospital*	Wilkes-Barre, Pa.	G. E. Baker	OB	3,079	.....	5,305	.....	1	9/1	1	100.00
Providence Lying-In Hospital	Providence, R. I.	A. L. Potter	OB†	7,117	.....	11,105	.....	2	7/1, 12/1	1	110.00
Roper Hospital[a]	Charleston, S. C.	L. A. Wilson and F. G. Cain	OBG	1,808	636	5,679	2,948	3	7/1	3	25.00
Columbia Hospital[a]	Columbia, S. C.	M. E. Hutchinson	OBG	1,885	1,016	1,095	883	2	7/1	1	75.00
Greenville General Hospital[a]	Greenville, S. C.	J. D. Guess	OBG	3,842	.....	2,325	.....	2	7/1	1	100.00
Baroness Erlanger Hospital[a]	Chattanooga, Tenn.		OB	3,545	.....	6,127	.....	3	.....	1	.....
Baptist Memorial Hospital*	Memphis, Tenn.	W. A. Ruch	OBG†	2,682	2,213	1,572	1,847	2	7/1	1	75.00
John Gaston Hospital*	Memphis, Tenn.	F. E. Whitacre F. E. Whitacre	OB Gyn	4,704	 873	9,323	 7,547	5 5	.....	.. 3	.....
Methodist Hospital[a,b]	Memphis, Tenn.	C. G. Bringæ	OB	2,929	.....	.....	.....	1	7/1	1	75.00
St. Joseph Hospital[a,b]	Memphis, Tenn.	M. J. Roach and G. Burkle	OBG	2,061	1,373	583	489	4	.....	2	.....
George W. Hubbard Hospital of Meharry Medical College*	Nashville, Tenn.	W. F. B. James and M. Walker	OBG	700	296	2,318	506	3	7/1	2	75.00
Nashville General Hospital*	Nashville, Tenn.	M. S. Lewis and R. S. Duke	OBG	.....	.....	.....	.....	4	.....	1	.....
Vanderbilt University Hospital[a,b]	Nashville, Tenn.	J. C. Burch	OBG	2,155	679	6,322	5,562	9	7/1	3	35.41
Baylor University Hospital[a]	Dallas, Texas	W. K. Strother	OBG	5,864	1,075	4,157	1,370	..	7/1	3	50.00
Methodist Hospital*	Dallas, Texas		OBG	2,616	424	1,737	559	3	7/1	1	75.00
Parkland Hospital	Dallas, Texas		OBG	.....	.....	.....	.....	8	.....	3	.....
Hotel Dieu, Sisters Hospital (St. Joseph's Maternity Hospital)	El Paso, Texas	F. C. Bernell	OBG†	.....	.....	.....	.....	1	1/1	1	150.00
Harris Hospital[a]	Fort Worth, Texas	C. Hiett	OBG†	3,547	1,358	1,322	538	3	7/1	1	100.00
University of Texas Medical Branch Hosps.[a]	Galveston, Texas	W. R. Cooke	OBG	1,272	615	4,067	5,376	7	7	3	.....
Hermann Hospital*	Houston, Texas	A. L. Dippel and C. Gugsley	OBG	1,533	1,368	5,933	2,452	6	.....	3	50.00
Jefferson Davis Hospital[a]	Houston, Texas	C. Q. Davis and C. Hamilton	OBG†	2,976	1,202	16,718	6,992	8	7/1	2	50.00
Memorial Hospital	Houston, Texas	J. A. Clapp and F. Harris	OBG	2,848	.....	.....	.....	2	.....	3	.....
Methodist Hospital[a,b]	Houston, Texas	D. Wachsman and J. Hall	OBG	976	588	2,755	229	2	7/1	2	75.00
St. Joseph's Infirmary*	Houston, Texas	J. P. Salerno	OB	6,760	1,200	.....	.....	4	.....	2	150.00
Thomas D. Dee Memorial Hospital[a]	Ogden, Utah	V. L. Ward	OBG	2,019	562	.....	193	2	7/1	3	100.00
Dr. W. H. Groves Latter-Day Saints Hospital[a]	Salt Lake City	W. M. Nebeker	OBG	3,988	1,076	.....	40	4	7/1	3	75.00
Holy Cross Hospital[a]	Salt Lake City	R. Wherritt	OB	2,625	.....	.....	.....	2	7/1	2	50.00
Salt Lake County General Hospital[a,b]	Salt Lake City	E. G. Holmstrom	OBG	576	319	1,317	1,066	2	7/1	1	50.00
Mary Fletcher Hospital*	Burlington, Vt.	H. A. Durfee	OBG†	1,085	403	.....	15	2	1/1	1	110.00
Alexandria Hospital[a]	Alexandria, Va.	H. Picot	OBG†	2,057	609	.....	.....	2	7/1	..	100.00
Arlington Hospital[a]	Arlington, Va.	J. B. Jacobs	OB	1,446	.....	.....	.....	1	7/1	1	100.00
University of Virginia Hospital[a,b]	Charlottesville, Va.	J. M. Nokes	OBG	1,779	854	6,992	.....	4	7/1	3	62.00
DePaul Hospital[a,b]	Norfolk, Va.	J. R. Kight	OBG	2,425	720	498	325	4	7/1	1	75.00
Norfolk General Hospital*	Norfolk, Va.	C. J. Andrews	OB†	1,868	.....	.....	.....	2	7/1	2	75.00
Medical College of Virginia, Hospital Div.*[a]	Richmond, Va.	H. H. Ware, Jr.	OB	5,018	.....	9,759	.....	8	7/1	3	46.50
King County Hospital*	Seattle	R. R. de Alvarez	OBG	1,104	641	4,989	2,267	2	7/1	3	90.00
Providence Hospital[a]	Seattle	J. Clancy	OB	2,564	.....	582	.....	1	7/1	1	100.00
Swedish Hospital*	Seattle	W. W. Bell	OBG	3,408	684	.....	.....	1	2/1	2	100.00
Virginia Mason Hospital*	Seattle	C. D. Kimball	OB	1,787	.....	.....	.....	1	7/1	1	75.00
St. Luke's Hospital[a,b]	Spokane	R. E. Gillett	OBG	.....	.....	.....	.....	1	.....	1	.....
St. Mary's Hospital*	Huntington, W. Va.	C. H. Boso	OB	1,949	.....	748	.....	1	7/1	1	100.00
State of Wisconsin General Hospital[a,b]	Madison, Wis.	J. W. Harris	OBG	.....	980	.....	7,452	3	9	3	25.00
Milwaukee County Hospital[a,b]	Milwaukee	R. S. Cron	OBG	695	759	1,798	1,685	3	.....	3	158.02
Milwaukee Hospital*	Milwaukee	R. S. Cron	OBG	5,656	133	.....	.....	3	7	3	75.00
St. Joseph's Hospital*	Milwaukee	H. Olson	OBG	4,288	856	.....	.....	2	7	3	75.00
St. Mary's Hospital*	Milwaukee	J. D. Owen	OBG†	2,076	530	.....	.....	4	7/1	1	.....
Kapiolani Maternity and Gynecological Hosp.[1]	Honolulu, Hawaii	H. E. Bowles	OBG	3,926	.....	936	.....	3	11	2	150.00
Queen's Hospital[a]	Honolulu, Hawaii	F. Spencer	OBG	2,617	562	1,267	402	2	7	1	75.00

Numerical and other references will be found on page 225.

13. OCCUPATIONAL MEDICINE

Approval of residencies in Occupational Medicine has been authorized by the American Medical Association. Institutions desiring residency approval in this field should make application to the Council on Medical Education and Hospitals, 535 N. Dearborn Street, Chicago 10, Illinois.

14. OPHTHALMOLOGY AND OTOLARYNGOLOGY

The following services approved by the Council are acceptable to the American Board of Ophthalmology and the American Board of Otolaryngology respectively.

Hospitals, 180; Assistant Residencies and Residencies, 820

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered*	Beginning of Service (July)	Beginning Stipend (Month)
				Oph	Otol	Oph	Otol			
United States Army										
Letterman General Hospital*	San Francisco	E. Maxwell	Oph	431	.....	6,002	.....	2	.....	n
		W. A. Weller	Otol	.....	448	.....	7,434	2	.....	n
Fitzsimons General Hospital*	Denver	A. J. Vaduva	Oph	306	.....	5,812	.....	3	.....	n
		.....	Otol	.....	691	.....	17,300	2	.....	n
Walter Reed General Hospital*	Washington, D. C.	A. Lowrey, Jr.	Oph	309	.....	36,443	.....	4	1, 7	n
		M. E. Ringer	Otol	.....	779	.....	15,701	6	1, 7	n
Oliver General Hospital*	Augusta, Ga.	W. C. Royals	Oph	250	.....	5,527	.....	1	1/1	n
		W. C. Royals	Otol	.....	674	.....	8,152	2	1/1	n
Brooke General Hospital*	San Antonio, Texas	R. C. House	Oph	516	.....	11,138	.....	2	.....	n
		H. S. Murphey	Otol	.....	912	.....	11,579	2	.....	n
Gorgas Hospital*	Ancon, C. Z.	.....	Oph	240	.....	9,400	.....	2	7/1	n
United States Navy										
U. S. Naval Hospital*	Long Beach, Calif.	R. C. Boyden	Oph	240	.....	.....	.....	1	Varies	n
U. S. Naval Hospital*	Oakland, Calif.	A. C. Hohn	Oph	.....	.....	.....	.....	2	.....	n
		P. O. Northington	Otol	.....	.....	.....	.....	2	.....	n
U. S. Naval Hospital*	San Diego, Calif.	O. W. Chenault	Oph	408	.....	9,261	.....	2	.....	n
		O. W. Chenault	Otol	.....	1,869	.....	4,181	2	.....	n
U. S. Naval Hospital*	Bethesda, Md.	A. J. Delaney	Oph	293	.....	3,525	.....	2	.....	n
		A. J. Delaney	Otol†	.....	1,356	.....	5,286	1	.....	n
U. S. Naval Hospital*	St. Albans, N. Y.	W. L. Berkeley	Oph	112	.....	3,880	.....	2	.....	n
U. S. Naval Hospital*	Philadelphia	F. Harbert	Oph	1,410	.....	12,003	.....	3	.....	n
		F. Harbert	Otol†	.....	2,851	.....	11,509	4	.....	n
United States Public Health Service										
U. S. Marine Hospital*[1]	New Orleans	L. M. Smith	Oph	106	.....	3,503	.....	1	7/1	n
U. S. Marine Hospital*	Seattle	H. U. Maness	Oph†	750	.....	4,000	.....	3	7/1	n
Veterans Administration										
Veterans Admin. Center[1]	Los Angeles	.....	Oph	.....	.....	.....	.....	2	.....	n
		.....	Otol	.....	.....	.....	.....	5	.....	n
Veterans Admin. Hospital	San Francisco	.....	Oph	148	.....	2,339	.....	3	7/1	n
		.....	Otol	.....	391	.....	4,594	3	7/1	n
Veterans Admin. Hospital[1]	Van Nuys, Calif.	G. C. Strubie	Oph	195	.....	1,838	.....	1	.....	n
		S. Kaplan	Otol	.....	600	.....	1,908	3	7/1, 1/1	n
Veterans Admin. Hospital[1]	Ft. Logan, Colo.	.....	Otol	.....	.....	.....	.....	..	.....	n
Veterans Admin. Hospital	Chamblee, Ga.	F. P. Calhoun, Jr.	Oph	183	.....	1,006	.....	2	7/1	n
		L. A. Brown	Otol†	.....	139	.....	1,144	1	7/1	n
Veterans Admin. Hospital	Hines, Ill.	W. A. Mann	Oph†	479	.....	.....	.....	4	1/2, 7/1	n
		F. L. Lederer	Otol	.....	1,076	.....	.....	7	1/2, 7/1	n
Veterans Admin. Center[1]	Wadsworth, Kan.	E. T. Jones	Oph	414	.....	.....	.....	2	1, 7	n
†Veterans Admin. Hospital[1]	Louisville, Ky.	G. Uhde	Otol	.....	346	.....	88	2	.....	n
Veterans Admin. Hospital[1]	New Orleans	G. M. Haik	Oph	139	.....	579	.....	1	7/1	n
		E. G. Walls	Otol†	.....	333	.....	876	2	7/1	n
Veterans Admin. Hospital[1]	Framingham, Mass.	.....	Otol	.....	.....	.....	.....	..	.....	n
Veterans Admin. Hospital	Minneapolis	.....	Oph	114	.....	.....	.....	3	.....	n
		.....	Otol	.....	675	.....	.....	6	.....	n
Veterans Admin. Hospital[1]	Jefferson Bks., Mo.	.....	Otol	.....	564	.....	.....	3	.....	n
Veterans Admin. Hospital	New York City	P. K. Sauer	Oph	379	.....	2,242	.....	5	7	n
		P. K. Sauer	Otol	.....	767	.....	3,319	6	1, 7	n
Veterans Admin. Hospital[1]	Cleveland, Ohio	P. J. Parisi	Oph	323	.....	4	.....	2	7/1	n
		E. J. Baxter	Otol	.....	963	.....	25	2	7/1	n
Veterans Admin. Hospital[1]	Oklahoma City, Okla.	L. K. Emmonser	Oph	180	.....	.....	.....	1	7	n
Veterans Admin. Hospital	Portland, Ore.	A. B. Dykman	Oph	106	.....	.....	.....	1	1/1, 7/1	n
		R. A. Fenton	Otol	.....	174	.....	.....	1	1/1, 7/1	n
Veterans Admin. Hospital	Aspinwall, Pa.	D. P. Cordray	Onh	725	.....	.....	.....	3	7/1	n
		D. P. Cordray	Otol	.....	751	.....	.....	3	7/1	n
†Veterans Admin. Hospital	Memphis, Tenn.	S. D. Maiden	Otol	.....	749	.....	1,537	3	7/1	n
Veterans Admin. Hospital[1]	Dallas, Texas	.....	Oph	102	.....	.....	.....	1	1/1, 7/1	n
		.....	Otol†	.....	179	.....	.....	1	1/1, 7/1	n
Veterans Admin. Hospital[1]	McKinney, Texas	M. Thomas	Oph	.....	.....	.....	.....	1	.....	n
Veterans Admin. Center[1]	Milwaukee	.....	Oph	168	.....	2,271	.....	3	7/1	n
		.....	Otol	.....	344	.....	3,781	4	7/1	n
Nonfederal										
Jefferson-Hillman Hospital*[1]	Birmingham, Ala.	A. Calahan	Oph	822	.....	6,814	.....	3	.....	.....
		G. E. Fisher	Otol	.....	782	.....	5,267	4	.....	.....
Arkansas Baptist Hospital*[1]	Little Rock, Ark.	K. W. Cosgrove	Otol	.....	818	.....	.....	1	.....	.....
Fresno County General Hospital*	Fresno, Calif.	H. Awtrey	Oph	554	.....	1,949	.....	1	7/1	$211.00
Childrens Hospital*[1]	Los Angeles	A. Miller	Otol	1,189	2,610	2	1	1	.....	119.00
Los Angeles County Hospital*[1]	Los Angeles	W. J. Endres	Oph	962	.....	12,961	.....	4	Varies	161.00
		J. M. Brown	Otol	.....	1,816	.....	10,408	4	Varies	165.00
Santa Fe Coast Lines Hospital*	Los Angeles	.....	Oph	.....	.....	.....	.....	..	.....	.....
White Memorial Hospital*	Los Angeles	M. W. Nugent	Oph	140	.....	6,812	.....	2	7/1	140.00
		B. N. Colver	Otol	.....	1,082	.....	8,685	2	7/1	140.00
San Diego County General Hospital*	San Diego, Calif.	G. Kilgore and J. W. Hendrickson	OpOt	539	456	3,247	3,656	2	7/1	125.00
Children's Hospital*[1]	San Francisco	C. Dickey	Ot	.....	1,349	2,415	.....	1	.....	.....
Greens' Eye Hospital	San Francisco	V. V. Suglian	Oph	731	.....	48,448	.....	2	7/1	50.00
San Francisco Hospital*[1]	San Francisco	.....	Oph	249	.....	.....	.....	2	.....	175.00
		.....	Otol	.....	626	.....	.....	1	.....	175.00
Stanford University Hospital*[1]	San Francisco	A. E. Maumenee	Oph	730	.....	8,084	.....	4	7/1	50.00
		R. C. McNaught	Otol	.....	803	.....	9,347	2	7/1	50.00

Numerical and other references will be found on page 225.

14. OPHTHALMOLOGY AND OTOLARYNGOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered *	Beginning of Service (1940)	Beginning Stipend (Month)
				Oph	Otol	Oph	Otol			
University of California Hospital*[1]	San Francisco	F. C. Cordes	Oph	312	.....	13,387	.....	3	7/1, 8/1, 9/1	$50.00
		F. L. Morrison	Otol	...	675	.....	6,971	2	7/1, 8/1, 9/1	50.00
University of Colorado Medical Center, Colorado General Hospital*[1]	Denver	R. W. Danielson	Oph	143	.....	7,196	.....	2	7/1	75.00
		H. L. Hickey	Otol	.....	323	.....	4,402	1	7/1	75.00
Denver General Hospital*[1]	Denver		Otol	.....	.....	.....	.....	..	.....	.....
Grace-New Haven Community Hospital, New Haven Unit (University Service)*[1]	New Haven, Conn	E. Blake	Oph†	347	.....	5,568	.....	1	7/1	40.00
		N. Canfield	Otol	.....	652	.....	4,618	3	7/1	40.00
Episcopal Eye, Ear and Throat Hospital [1]	Washington, D. C.	G. V. Simpson	Oph	.....	.....	.....	.....	5	1/1	25.00
		W. H. Jenkins	Otol	.....	.....	.....	.....	4	1/1	25.00
Gallinger Municipal Hospital*[1]	Washington, D. C.		OpOt	92	705	4,493	6,535	3	7/1	100.00
Grady Memorial Hospital*[1]	Atlanta, Ga	A. V. Hudiam and W. C. Warren	OpOt	383	748	10,389	8,300	6	7/1	.....
Cook County Hospital*[1]	Chicago	D. T. Vail	Oph	555	.....	16,063	.....	6	7/1, 8/1	32.00
		S. J. Pearlman	Otol	.....	2,594	.....	21,514	5	7/1, 8/1	32.00
Illinois Eye and Ear Infirmary [1]	Chicago		Oph	2,413	.....	57,179	.....	18	7/1	.....
			Otol	.....	1,899	.....	30,560	13	7/1	.....
Mercy Hospital-Loyola University Clinics*[1]	Chicago	L. G. Hoffman and R. W. Kerwin	OpOt	135	828	2,039	1,441	1	.....	25.00
Michael Reese Hospital*[1]	Chicago	T. Shapira	Oph	538	.....	4,049	.....	2	1/1, 7	25.00
		N. Leshin	Otol	.....	2,692	.....	1,948	..	1/1, 7	.....
Passavant Memorial Hospital*	Chicago	D. Vail	Oph	208	.....	523	.....	2	1/1, 7/1	.....
		J. F. Delph	Otol	.....	220	.....	1,365	1	7/1	.....
Presbyterian Hospital*	Chicago	J. M. Donegan	Oph	325	.....	5,537	.....	2	.....	25.00
		S. A. Friedberg	Otol	.....	813	.....	3,199	2	.....	25.00
Provident Hospital*[1]	Chicago	W. M. Jones and D. Mazique	OpOt	546	.....	5,571	1,842	2	7/1	50.00
Research and Educational Hospitals*[1]	Chicago	W. F. Hughes	Oph	230	.....	9,187	.....	2	7/1	55.00
		F. E. Leideker	Otol	.....	712	.....	10,296	2	7/1	55.00
St. Joseph Hospital*	Chicago	J. M. Donegan	Oph	38	.....	958	.....	1	?	.....
St. Luke's Hospital*	Chicago	R. C. Gilmore	Oph	.....	.....	.....	.....	1	7/1	25.00
		R. J. Coombs	Otol	390	1,350	1,090	.....	..	7/1	25.00
University of Chicago Clinics*[1]	Chicago	A. Krause	Oph	154	.....	11,575	.....	3	7/1	25.00
		J. R. Lindsey	Otol	.....	443	.....	9,350	3	7/1	25.00
Wesley Memorial Hospital*[1]	Chicago	W. A. Mann	Oph	338	.....	.....	.....	2	.....	25.00
		G. Shambaugh	Otol	.....	1,098	.....	.....	1	.....	25.00
Woodlawn Hospital*[1]	Chicago		Oph	186	.....	.....	.....	1	.....	.....
Indianapolis General Hospital*	Indianapolis	J. M. Masters	Oph	207	.....	6,357	.....	2	7/1	80.00
		R. Dearman	Otol	.....	812	.....	5,567	2	7/1	80.00
Indiana University Medical Center*[1]	Indianapolis	R. Masters	Oph	253	.....	3,277	.....	4	7/1	66.33
		C. McCaskey	Otol	.....	450	.....	2,418	3	7/1	66.33
University Hospitals*[1]	Iowa City	C. S. O'Brien	Oph	1,241	.....	5,373	.....	10	7/1	50.00
		D. M. Lierle	Otol	.....	2,310	.....	7,455	14	7/1	50.00
University of Kansas Medical Center*	Kansas City, Kan	S. E. Roberts	Otol	.....	778	.....	2,975	1	.....	.....
Louisville General Hospital*	Louisville, Ky	D. Townes and J. S. Bumgardner	OpOt	137	114	5,661	3,440	2	7/1	.....
Charity Hospital of Louisiana*[1]	New Orleans		OpOt	1,236	1,762	20,325	19,817	13	7/1	25.00
Eye, Ear, Nose and Throat Hospital [1]	New Orleans	W. R. Buffington	Oph	1,142	.....	29,492	.....	6	7/1	.....
		F. E. LeJune	Otol	.....	2,748	.....	31,242	6	7/1	.....
Touro Infirmary*	New Orleans	E. E. Adgeyer and S. Cohen	OpOt	99	1,255	2,496	2,578	1	.....	25.00
Baltimore Eye, Ear and Throat Charity Hosp.[1]	Baltimore	J. E. Brunback and R. G. Reaves	OpOt	917	3,085	12,721	7,550	5	.....	10.00
Johns Hopkins Hospital*	Baltimore	A. C. Woods	Oph	1,592	.....	20,259	.....	7	7/1	41.66
		S. J. Crowe	Otol	.....	1,223	.....	11,556	4	7/1	41.66
†South Baltimore General Hospital*[1]	Baltimore	S. Fox	Otol	.....	661	.....	1,375	2	6/1	75.00
University Hospital*[1]	Baltimore	F. E. Knowles, Jr. and E. A. Looper	OpOt	11	583	3,896	3,356	1	7/1	.....
Beth Israel Hospital*	Boston	G. B. Fred	Otol	.....	1,024	.....	2,455	1	10/2	41.66
Boston City Hospital*[1]	Boston	J. J. Regan	Oph	584	.....	15,617	.....	..	.....	.....
		E. J. Monahan	Otol	.....	2,553	.....	15,941	2	.....	.....
Lahey Clinic	Boston		Otol	.....	.....	.....	.....	2	.....	.....
†Massachusetts Eye and Ear Infirmary	Boston	E. B. Dunphy	Oph	1,577	.....	44,653	.....	10	.....	.....
		L. A. Senna	Otol	.....	2,047	.....	28,392	9	.....	.....
†Massachusetts Memorial Hospitals*[1]	Boston	L. F. Johnson	Otol	.....	1,723	.....	.....	1	6/1	50.00
Memorial Hospital*[1]	Worcester, Mass	A. L. Caron	Otol	.....	1,905	.....	.....	1	.....	100.00
University Hospital*[1]	Ann Arbor, Mich	F. B. Franck	Oph	670	.....	13,855	.....	4	7/1	111.80
		A. C. Furstenberg	Otol	.....	829	.....	10,932	5	7/1	111.80
City of Detroit Receiving Hospital*[1]	Detroit	R. D. Ruedemann and J. M. Robb	OpOt	294	398	11,918	5,087	6	7/1	188.00
Grace Hospital*[1]	Detroit	R. S. Goux	OpOt	2,143		2,883		3	7/1	75.00
Harper Hospital*[1]	Detroit	R. H. Pino and W. Warren	OpOt	1,212	2,889	6,531	1,774	3	7/1	.....
Henry Ford Hospital*[1]	Detroit	E. L. Whitney	Oph	292	.....	17,235	.....	3	7/1	200.00
		J. L. Dill	Otol	.....	1,164	.....	18,942	3	7/1	200.00
Wayne County General Hosp. and Infirmary*[1]	Eloise, Mich	F. T. May	OpOt		460		5,392	2	7/1	235.00
Minneapolis General Hospital*[1]	Minneapolis	W. K. Haven and R. E. Priest	OpOt	150	136	3,404	2,152	3	7/1, 1/1	115.00
University of Minnesota Hospitals*[1]	Minneapolis	E. Hansen	Oph	.....	.....	.....	.....	12	.....	.....
		L. R. Boies	Otol	.....	.....	.....	.....	8	.....	.....
Mayo Foundation	Rochester, Minn	W. L. Benedict	Oph	.....	.....	.....	.....	12	.....	92.50
		H. I. Lillie	Otol	.....	.....	.....	.....	12	.....	92.50
Ancker Hospital*	St. Paul	J. Hilger	OpOt	93	235	2,665	1,813	2	.....	.....
Charles T. Miller Hospital*[1,24]	St. Paul	E. Burch	Oph	689	.....	2,327	.....	2	.....	115.00
St. Louis County Hospital*	Clayton, Mo	J. Green	Oph	107	.....	3,547	.....	2	7/1	80.00
Children's Mercy Hospital	Kansas City, Mo	W. R. Eubank and R. Parker	OpOt	62	407	1,085	1,282	1	.....	.....
Kansas City General Hospital No. 1*	Kansas City, Mo	A. J. Baer	Oph	218	.....	4,024	.....	2	7	.....
		J. S. Knight	Otol	.....	709	.....	3,744	1	7	50.00
Barnes Hospital*[1]	St. Louis	L. T. Post	Oph	1,483	.....	1,901	.....	6	7/1	10.00
		T. E. Walsh	Otol	.....	3,227	.....	830	9	7/1	10.00
Homer G. Phillips Hospital*[1]	St. Louis	L. T. Post and L. W. Dean	OpOt	156	465	2,717	2,878	2	7/1	95.00
Jewish Hospital*[1]	St. Louis		Otol	.....	388	.....	.....	1	.....	50.00
St. Louis City Hospital*[1]	St. Louis	Bismo and Eber	Oph	132	.....	3,717	.....	2	7/1	95.00
		T. Walsh	Otol	.....	415	.....	3,752	1	7/1	95.00

Numerical and other references will be found on page 225.

14. OPHTHALMOLOGY AND OTOLARYNGOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
				Oph	Otol	Oph	Otol			
St. Mary's Group of Hospitals*	St. Louis	W. H. Luedde	Oph	260	.....	7,619	.....	3	7/1	$ 35.00
		B. J. McMahon	Otol	.....	999	.....	5,075	3	7/1	35.00
University of Nebraska Hospital*†	Omaha	J. H. Judd	Oph	132	.....	807	.....	2	7/1	75.00
Jersey City Hospital*†	Jersey City, N. J.	F. X. Brophy and M. G. Borrone	OpOt	281	1,800	6,405	7,578	5	.....	.....
Newark City Hospital*	Newark, N. J.	H. Orten	Otol	.....	.....	.....	.....	2	7	.....
Newark Eye and Ear Infirmary	Newark, N. J.		Oph	1,632	.....	6,408	.....	2	.....	.....
			Otol	.....	133	.....	2,645	..	.....	.....
Albany Hospital*†	Albany, N. Y.	H. K. Tebbutt, Jr.	Otol	.....	776	.....	1,585	2	7/1	41.67
Brooklyn Eye and Ear Hospital †	Brooklyn		Oph	2,363	.....	47,626	.....	8	.....	.....
			Otol	.....	6,791	.....	14,084	5	.....	.....
Jewish Hospital*†	Brooklyn	C. Kaplan	Otol	.....	248	.....	2,782	1	.....	.....
Kings County Hospital*†	Brooklyn	W. Moehle	Oph	414	.....	10,684	.....	2	1/1, 7/1	50.00
		A. Christensen	Otol	.....	1,429	.....	5,793	2	7/1	80.00
Long Island College Hospital*†	Brooklyn	M. A. Lasky	Oph	175	.....	4,245	.....	3	7/1	25.00
		C. R. Weeth	Otol	.....	570	.....	2,331	1	7/1	25.00
Buffalo General Hospital*	Buffalo	C. C. Cott	Otol	.....	788	.....	4,956	3	7/1	25.00
Edward J. Meyer Memorial Hospital*†	Buffalo	I. J. Koenig	Oph	99	.....	3,101	.....	4	.....	100.00
		H. E. Bozer	Otol	.....	122	.....	1,836	2	.....	100.00
Queens General Hospital*†	Jamaica, N. Y.	W. G. Frey	Oph	223	.....	5,226	.....	1	8/15	80.00
		M. S. Bender	Otol	.....	823	.....	4,568	2	7/1	80.00
New Rochelle Hospital*	New Rochelle, N. Y.	A. L. Beck	OpOt	.....	1,305	801	644	1	.....	.....
Bellevue Hospital, Div. III—N. Y. Univ.*†	New York City	D. Kirby	Oph	4,351	.....	14,353	.....	2	1, 7	60.00
		J. Daly	Otol	.....	2,185	.....	15,247	2	1, 7	60.00
Beth Israel Hospital*†	New York City	E. B. Gresser	Oph	223	.....	3,669	.....	1	7/1	50.00
		M. L. Som	Otol†	.....	513	.....	5,042	1	7/1	50.00
Bronx Eye and Ear Infirmary	New York City		Oph	834	.....	14,353	.....	1	7/1	50.00
			Otol†	.....	2,854	.....	13,824	1	7/1	50.00
Flower and Fifth Avenue Hospitals*†	New York City	J. A. W. Hetrick	Otol	.....	181	.....	1,932	2	7/1	.....
Goldwater Memorial Hospital*†	New York City	I. W. Smith	Oph	1,484	.....	1,521	.....	3	7/1-	70.00
Harlem Eye and Ear Hospital †	New York City	C. B. Meding and E. Grabscheid	OpOt	638	1,858	17,473	17,161	3	.....	.....
Harlem Hospital*†	New York City	H. J. Burman	Otol	.....	607	.....	6,836	2	.....	.....
Lenox Hill Hospital*†	New York City	J. J. Reid	Oph	305	.....	.....	.....	1	4/1	50.00
		G. F. Oberfeuder	Otol	.....	1,199	.....	.....	1	7/1	50.00
Manhattan Eye, Ear and Throat Hospital †*†	New York City		Oph	2,592	.....	74,956	.....	10	Varies	.....
			Otol	.....	9,711	.....	61,136	7	7/1	.....
Metropolitan Hospital*†	New York City	C. A. Turtz	Oph	99	.....	3,596	.....	1	7/1	130.00
		J. A. W. Hetrick	Otol	.....	343	.....	4,150	1	7/1	130.00
Morrisania City Hospital*†	New York City	G. B. Gilmore	Otol	.....	.....	.....	3,431	1	.....	50.00
Mount Sinai Hospital*†	New York City	H. Minsky	Oph	.....	.....	.....	.....	3	.....	50.00
		R. Kramer	Otol	.....	.....	.....	.....	2	.....	50.00
New York City Hospital*†	New York City	O. C. Risch	Otol	.....	466	.....	4,994	1	7/1	130.00
New York Eye and Ear Infirmary †	New York City	C. Berens	Oph	.....	.....	62,677	.....	13	10/1	.....
		S. L. Craig	Otol	6,361	.....	.....	42,849	13	10/1	.....
New York Hospital*	New York City	Glenn and Moore	Otol	.....	.....	.....	12,672	3	7/1	25.00
New York Polyclinic Medical School and Hosp.*	New York City		OpOt	168	649	4,966	7,743	3	7/1	50.00
Presbyterian Hospital*†	New York City	J. H. Dunnington	Oph	2,552	.....	29,333	.....	9	.....	41.66
		F. P. Fowler, Jr.	Otol	.....	1,962	.....	22,247	8	.....	41.66
Roosevelt Hospital*†	New York City	R. C. Grove	Otol	.....	708	.....	3,511	1	7/1	70.00
St. Luke's Hospital*	New York City	W. G. Frey	Oph	252	.....	8,136	.....	1	7/1	50.00
		J. W. Fowlkes	Otol	.....	1,341	.....	9,291	3	7/1	50.00
University Hospital*	New York City	R. Archi	Oph	334	.....	7,608	.....	3	Varies	15.00
		P. S. Seager	Otol	.....	739	.....	6,740	3	Varies	15.00
Rochester General Hospital*†	Rochester, N. Y.	E. R. Vernou and E. L. Avery	OpOt	184	1,258	1,361	1,446	2	.....	.....
Strong Memorial-Rochester Municipal Hosps.*†	Rochester, N. Y.	J. F. Gipner	Oph	385	.....	4,841	.....	2	7/1	45.00
		C. A. Heatly	Otol	.....	1,229	.....	3,820	3	7/1	45.00
Sea View Hospital †	Staten Island, N. Y.	J. Gilbert	Otol	.....	650	.....	.....	2	7/1	130.00
Syracuse University Medical Center	Syracuse, N. Y.	G. D. Hoople	Otol	.....	1,172	.....	656	1	7/1	.....
Grasslands Hospital*†	Valhalla, N. Y.	C. Wood	Oph	120	.....	4,678	.....	2	7	125.00
		M. T. Smith	Otol	.....	266	.....	1,854	1	7	125.00
†Charlotte Memorial Hospital*	Charlotte, N. C.	V. K. Hart	Otol	.....	644	.....	137	1	.....	.....
Duke Hospital*†	Durham, N. C.	W. B. Anderson and W. W. Eagle	OpOt	407	591	3,439	3,101	8	7/1	83.33
†North Carolina Baptist Hospital*†	Winston-Salem, N. C.		Otol	.....	476	.....	3,373	1	7/1	.....
Cincinnati General Hospital*†	Cincinnati	D. Lyle	Oph	392	.....	8,286	.....	2	7/1	.....
		H. Goodyear	Otol	.....	970	.....	6,137	2	7/1	.....
City Hospital*†	Cleveland	G. L. Miller	Oph	169	.....	5,383	.....	2	7/1	70.00
		C. W. Engler	Otol	.....	710	.....	3,787	2	7/1	70.00
Cleveland Clinic Hospital †	Cleveland	R. J. Kennedy	Oph	497	.....	27,526	.....	3	7/1	100.00
		P. M. Moore, Jr.	Otol	.....	707	.....	14,156	7	7/1	100.00
St. Luke's Hospital*	Cleveland	M. W. Jacoby	Otol	351	.....	2,077	.....	1	6/25	90.00
		T. W. Thoburn	Otol	.....	2,443	.....	1,904	2	6/25	90.00
University Hospitals*†	Cleveland	A. B. Bruner	Oph	953	.....	6,030	.....	4	7/1	25.00
		C. C. R. Jackson	Otol	.....	2,011	.....	3,702	3	7/1	25.00
Ohio State University Hospital*†	Columbus, Ohio	A. Culler	Oph	214	.....	5,629	.....	4	7/1	50.00
		H. G. Beatty	Otol	.....	374	.....	2,634	1	7/1	50.00
University Hospitals*†	Oklahoma City	J. P. McGee and C. McHenry	OpOt	278	298	3,350	1,761	2	7/1	33.00
University of Oregon Medical School Hospitals and Clinics*†	Portland, Ore.	K. C. Swan	Oph	227	.....	9,886	.....	4	7/1	75.00
		G. L. Boyden	Otol	.....	577	.....	5,081	2	7/1	75.00
George F. Geisinger Memorial Hospital*	Danville, Pa.	C. H. Jacobs	Oph	247	.....	7,477	.....	1	.....	75.00
		F. W. Davison	Otol	.....	932	.....	10,218	2	.....	75.00
Episcopal Hospital*†	Philadelphia	O. C. Hirst and J. A. Bertolet	Otol	.....	712	.....	2,798	1	7/1	50.00
Graduate Hosp. of the Univ. of Pennsylvania*	Philadelphia		Oph	737	.....	3,995	.....	3	7/1	.....
			Otol	.....	1,434	.....	3,048	4	7/1	.....
Hospital of the University of Pennsylvania*†	Philadelphia	F. H. Adler	Oph	751	.....	8,554	.....	7	7/1	.....
		H. P. Schenk	Otol	.....	1,042	.....	3,142	4	Varies	.....
Jefferson Medical College Hospital*	Philadelphia	L. H. Clerf	Oph	.....	.....	.....	.....	4	7/1	.....
			Otol	.....	2,226	.....	13,423	4	7/1	.....
†Pennsylvania Hospital*	Philadelphia	E. H. Campbell	Otol	.....	502	.....	3,327	1	7/1	20.00
Philadelphia General Hospital*†	Philadelphia		Oph	191	.....	.....	.....	2	7/1	70.00
			Otol†	.....	199	.....	.....	1	7/1	70.00
Temple University Hospitals*†	Philadelphia	G. G. Gibson	Oph	273	.....	2,826	.....	3	7/1	.....
		M. S. Ersner	Otol	.....	1,694	.....	2,459	1	7/1	.....

Numerical and other references will be found on page 225.

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14. OPHTHALMOLOGY AND OTOLARYNGOLOGY—Continued

Name of Hospital	Location	Chief of Service	Residencies Approved	Inpatients Treated		Outpatient Visits		Asst. Res. and Residencies Offered *	Beginning of Service (1940)	Beginning Stipend (Month)
				Oph	Otol	Oph	Otol			
Wills Hospital [1]	Philadelphia		Oph	4,119	.....	105,863	.....	12	.....	.....
Eye, Ear, Nose and Throat Hospital [1]	Pittsburgh	J. G. Linn and J. H. McCready	OpOt	1,398	4,421	.....	.....	4	1/1	$ 41.66
Mercy Hospital*[1]	Pittsburgh	W. L. Allison	Otol	.....	2,041	.....	2,940	2	9/1	100.00
Robert Packer Hospital*[1]	Sayre, Pa.		Otol	.....	.....	.....	.....	..	7/1	100.00
Knoxville General Hospital*	Knoxville, Tenn.	H. E. Christenberry, Jr.	OpOt	91	377	1,074	894	1	7/1	70.00
John Gaston Hospital*	Memphis, Tenn.	W. L. Simpson	Otol	.....	819	.....	5,788	2	.....	.....
Memphis Eye, Ear, Nose and Throat Hospital	Memphis, Tenn.	J. B. Stanford and S. H. Sanders	OpOt	.....	.....	.....	.....	4	.....	40.00
Nashville General Hospital*	Nashville, Tenn.	N. B. Norris	OpOt	.....	.....	.....	.....	1	.....	.....
Vanderbilt University Hospital*[1]	Nashville, Tenn.		Otol	(Included in Surgery)				1	7/1	35.41
Parkland Hospital*[1]	Dallas, Texas	J. D. Singleton and J. G. Jones	OpOt	172	217	3,029	2,375	2	.....	.....
University of Texas Medical Branch Hosps.*[1]	Galveston, Texas	J. M. Robison	Otol	.....	440	.....	6,412	2	7	50.00
Jefferson Davis Hospital*[1]	Houston, Texas	R. K. Daily	Oph	274	.....	5,398	.....	2	7/1	50.00
		H. H. Harris	Otol	.....	394	.....	5,359	1	7/1	50.00
University of Virginia Hospital*[1]	Charlottesville, Va.	E. Burton	Oph	303	.....	3,066	.....	2	7/1	15.50
		F. D. Woodward	Otol	.....	1,270	.....	5,002	3	7/1	15.50
Medical College of Virginia Hospital Division*[1]	Richmond, Va.	R. H. Courtney and P. N. Pastore	OpOt	498	681	5,331	3,224	*6	7/1	46.50
Gill Memorial Eye, Ear and Throat Hospital [1]	Roanoke, Va.	E. G. Gill	OpOt	1,572		240		4	.....	.....
King County Hospital*	Seattle	C. D. F. Jensen	OpOt	359	.....	1,999	2,410	1	7/1	90.00
State of Wisconsin General Hospital*[1]	Madison, Wis.	F. A. Davis	Oph	622	.....	3,549	.....	3	7	25.00
		W. Nesbit	Otol	.....	501	.....	2,752	3	7	25.00
St. Joseph's Hospital*	Marshfield, Wis.	L. A. Coppe	Otol†	.....	750	.....	.....	1	.....	.....
Milwaukee County Hospital*[1]	Milwaukee	T. F. McCormick and J. E. Mulow	OpOt	318	350	5,025	1,679	5	Varies	158.02

15. ORTHOPEDIC SURGERY

The following services are approved by the Council and the American Board of Orthopedic Surgery Hospitals, 257; Assistant Residencies and Residencies, 787

Name of Hospital	Location	Chief of Service	Type of Training [14]	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1940)	Length of Approved Program (Years)	Beginning Stipend (Month)
United States Army											
Letterman General Hospital*	San Francisco	O. B. Bolibaugh	AFS	1,987	2,093	8	8	11	.....	2	n
Fitzsimons General Hospital*	Denver	H. S. McBurney	AFS	1,085	3,058	4	4	6	.....	2	.....
Walter Reed General Hospital*	Washington, D. C.	A. W. Spittler	AFS	1,021	2,703	4	1	6	1, 7	2	.....
Oliver General Hospital*	Augusta, Ga.	E. Dehne	AFS	2,315	644	2	..	6	1/1, 7/1	2	Varies
Brooke General Hospital*	San Antonio, Texas	M. S. Thompson	AFS	4,136	4,809	4	4	7	.....	2	.....
Tripler General Hospital*	Moanalua, T. H.		AF	664	2,440	..	..	7	7/1	1½	.....
United States Navy											
U. S. Naval Hospital*	Long Beach, Calif.			.....	.....	..	..	2	.....	..	.....
U. S. Naval Hospital*	Oakland, Calif.	C. R. Carr	AFS	.....	.....	..	..	3	7	2	.....
U. S. Naval Hospital*	San Diego, Calif.	R. F. Legge	AF	1,569	1,815	12	7	5	.....	1½	.....
U. S. Naval Hospital*	Bethesda, Md.	J. V. Hopkins	AFS	227	268	13	3	3	.....	2	.....
U. S. Naval Hospital*	Chelsea, Mass.	W. C. Roland	AFS	.....	.....	..	..	1	.....	2	.....
U. S. Naval Hospital*	St. Albans, N. Y.	H. Osterlon	AFS	490	82	3	3	3	.....	2	.....
U. S. Naval Hospital*	Philadelphia	C. F. Morrison	AFS	494	6,983	4	2	3	.....	2	.....
United States Public Health Service											
U. S. Marine Hospital*[1]	Baltimore	J. D. Lane, Jr.	A	(Included in Surgery)				1	.....	1	.....
U. S. Marine Hospital*[1]	Stapleton, L. I., N. Y.	A. A. Michele	AF	2,010	8,035	7	3	6	7/1	1½	.....
Federal Security Agency											
Freedman's Hospital*[1]	Washington, D. C.	J. Neviaser	ACFS	207	4,553	10	1	1	7/1	3	$147.65
Veterans Administration											
Veterans Admin. Center [1]	Los Angeles	R. Mazet, Jr.	AFS	1,061	2,230	..	..	6	.....	2	.....
Veterans Admin. Hospital	San Francisco	J. J. Loutzenheiser and F. J. Cox	AF	364	1,346	1	1	3	7/1	1½	270.00
Veterans Admin. Hospital [1]	Van Nuys, Calif.	J. Aldes	AFS	578	2,358	..	..	5	1/1, 7/1	2	140.00
Veterans Admin. Hospital [1]	Fort Logan, Colo.	M. E. Gibbens	AF	525	.....	..	..	3	7	1½	.....
Veterans Admin. Hospital	Chamblee, Ga.	R. P. Kelley	AFS	869	530	2	1	3	7/1	2	200.00
Veterans Admin. Hospital [1]	Hines, Ill.	H. A. Sofield	AFS	1,537	.....	9	4	11	1/2, 7/1	2	200.00
Veterans Admin. Hospital [1]	Indianapolis	H. L. Egbert	AF	404		3	2	1	1, 7	1½	200.00
Veterans Admin. Center [1]	Wadsworth, Kan.	W. H. Snead	AFS	540	.....	2	2	6	1, 7	2	275.00
Veterans Admin. Hospital [1]	Louisville, Ky.	K. A. Fischer	AFS	1,383	53	..	..	4	.....	2	.....
Veterans Admin. Hospital [1]	New Orleans	R. H. Alldredge	AFS	740	685	5	3	4	7/1	2	275.00
Veterans Admin. Hospital	Fort Howard, Md.	J. Lyford	AFS	277	256	4	4	3	7	2	275.00
Veterans Admin. Hospital [1] (West Roxbury)	Boston	J. Barr	AS	512	1,514	..	..	2	7	1½	275.00
Veterans Admin. Hospital [1]	Framingham, Mass.		AFS	528	.....	1	1	4	.....	2	.....
Veterans Admin. Hospital	Minneapolis		AFS	1,072	.....	10	5	10	.....	2	.....
Veterans Admin. Hospital [1]	Jefferson Bks., Mo.		AFS	714	.....	..	..	6	.....	2	.....
Veterans Admin. Hospital	Lincoln, Neb.		AF	298	.....	5	4	3	.....	1½	.....
Veterans Admin. Hospital	Albuquerque, N. Mex.		AF	342	.....	1	1	1	7/1	1½	.....
Veterans Admin. Hospital	New York City	P. K. Sauer	AFS	707	310	6	3	7	7	2	.....
Veterans Admin. Hospital [1]	Staten Island, N. Y.	D. M. Bosworth	A	370	333	1	1	2	7/1	1	.....
Veterans Admin. Hospital [1]	Cleveland	C. A. Maxwell	AFS	866	91	1	1	7	7/1	2	.....
Veterans Admin. Hospital [1]	Oklahoma City	W. K. West	AFS	440	.....	3	1	2	7	2	.....
Veterans Admin. Hospital	Portland, Ore.	H. C. Blair	AFS	757	.....	4	1	3	.....	2	.....
Veterans Admin. Hospital	Aspinwall, Pa.	D. I. Schwartz	AFS	768	.....	2	2	3	7/1	2	.....
Veterans Admin. Hospital	Columbia, S. C.	K. M. Lippert	AFS	544	.....	5	..	4	7	2	.....
Veterans Admin. Hospital	Memphis, Tenn.	D. M. Street	AFS	1,018	1,430	3	2	9	7/1	2	.....
Veterans Admin. Hospital [1]	Dallas, Texas		AF	526	.....	4	2	4	1/1, 7/1	1½	.....
Veterans Admin. Hospital [1]	McKinney, Texas	T. McD. Anderson	AFS	.....	.....	..	..	5	.....	2	.....

Numerical and other references will be found on page 225.

15. ORTHOPEDIC SURGERY—Continued

Name of Hospital	Location	Chief of Service	Type of Training[14]	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered[9]	Beginning of Service (Mo.)	Length of Approved Program (Years)	Beginning Stipend (Month)
Veterans Admin. Hospital	Salt Lake City, Utah..	J. A. Gubler	A	.....	.....	..	..	7	1	.....	
Veterans Admin. Hospital[1]	Richmond, Va.	R. D. Butterworth	AF	427	387	1	1	4	7/1	1½	.....
Veterans Admin. Center[1]	Milwaukee, Wis.	P. L. Carnesale	AFS	1,131	2,464	3	1	6	7/1	2	.....
Nonfederal											
Jefferson-Hillman Hospitals[a1]	Birmingham, Ala.	J. D. Sherrill	ACFS	1,608	3,976	40	4	2	.....	3	.....
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company*	Fairfield, Ala.	C. H. Wilson	AFS	663	7,776	12	3	1	7/1	2	$225.00
City Hospital*	Mobile, Ala.		ACF	409	907	..	..	2	7/1	2½	100.00
Arkansas Children's Home and Hospital	Little Rock, Ark.	W. V. Newman	C	344	200	..	..	2	1/1	1	.....
Childrens Hospital*	Los Angeles	J. C. Wilson	C	477	3,465	1	..	1	.....	1	208.00
Los Angeles County Hospital[a1]	Los Angeles	V. P. Thompson	ACFS	4,493	35,414	175	18	12	Varies	3	165.00
Orthopaedic Hospital	Los Angeles		ACFS	2,357	42,519	..	..	5	1/1, 7/1	3	150.00
White Memorial Hospital*	Los Angeles	G. M. Taylor	AFS	469	4,567	5	1	1	7/1	2	140.00
Highland-Alameda County Hospital*[a1]	Oakland, Calif.	L. Barnard	AF	533	.....	44	6	3	.....	1½	100.00
Permanente Foundation Hospital*[a1]	Oakland, Calif.	P. H. Harmon	F	986	4,732	4	3	..	.....	½	.....
Samuel Merritt Hospital	Oakland, Calif.	H. Hitchcock	AFS	1,108	.....	..	..	2	1/18	2	110.00
San Diego County General Hospital*	San Diego, Calif.	F. Macpherson	AF	408	2,328	31	1	1	7/1	1½	125.00
Children's Hospital[a1]	San Francisco	L. Abbott	C	415	1,775	..	..	2	7/1	1	60.00
Franklin Hospital[a1]	San Francisco	L. C. Abbott and F. C. Bost	A	1,005	.....	3	2	3	7/1	1	100.00
St. Mary's Hospital*	San Francisco	J. Loutzenheiser	AF	.....	.....	..	..	1	7/1	1½	100.00
San Francisco Hospital*[a1,31]	San Francisco	F. C. Bost	AF	324	.....	30	6	2	.....	1½	175.00
Shriners Hospital for Crippled Children	San Francisco		C	262	2,836	..	..	2	4/1	1	100.00
Stanford University Hospitals*[a1,29]	San Francisco	D. E. King	ACFS	813	5,490	4	..	1	7/1	3	50.00
University of California Hospital*[a1]	San Francisco	L. C. Abbott	A	254	6,895	1	1	2	7/1, 8/1, 9/1	1	50.00
Santa Clara County Hospital*	San Jose, Calif.	G. Waters	AF	392	2,966	35	4	1	7/1	1½	225.00
Children's Hospital[1]	Denver	H. I. Barnard	C	518	3,299	1	1	2	7	1	50.00
University of Colorado Medical Center											
Colorado General Hospital*[a1]	Denver	H. I. Bernard	AFS	357	1,904	11	7	6	7/1	2	75.00
Denver General Hospital*[a1,28]	Denver	I. E. Hendryson	AF	1,018	2,226	27	12	2	7	1½	40.00
Corwin Hospitals*	Pueblo, Colo.	D. W. Beer	F	907	11,516	27	11	1	7/1	½	75.00
Hartford Hospital*[a1]	Hartford, Conn.	M. M. Pike	AFS	1,544	235	10	8	1	7/1	2	50.00
Grace-New Haven Community Hospital, New Haven Unit (University Service)*[a1]	New Haven, Conn.	M. Eveleth	AFS	503	5,000	14	4	5	7/1	2	40.00
Hospital of St. Raphael*	New Haven, Conn.	D. S. O'Connor	AF	.....	.....	..	..	1	7/1	1½	75.00
Newington Home and Hospital for Crippled Children	Newington, Conn.		C	398	2,914	..	..	2	1	1	100.00
Alfred I. du Pont Institute of the Nemours Foundation[1]	Wilmington, Del.	A. B. Shands	C	170	2,224	..	..	3	7/1	1	100.00
Central Dispensary and Emergency Hospital*[a1]	Washington, D. C.		F	939	1,235	15	5	4	.....	½	50.00
Gallinger Municipal Hospital*[a1,32]	Washington, D. C.		ACFS	513	5,303	12	3	5	7/1	3	.....
Hope Haven Hospital	Jacksonville, Fla.	F. Fort	C	282	.....	..	..	1	7/1	1	100.00
Jackson Memorial Hospital*[a1]	Miami, Fla.	A. H. Welland	ACF	1,625	2,239	32	13	3	7/1	2½	60.00
Grady Memorial Hospital*[a1]	Atlanta, Ga.	T. P. Goodwyn	AFS	914	8,304	25	4	9	7/1	2	.....
University Hospital*	Augusta, Ga.	F. Wright	ACFS	695	.....	21	1	3	7	3	40.00
Scottish Rite Hospital for Crippled Children	Decatur, Ga.	J. H. Kite	C	.....	.....	..	..	1	1	1	.....
†Emory University Hospital*	Emory University, Ga.	R. Kelly	C	402	.....	3	2	1	.....	1	.....
Children's Memorial Hospital*[a1]	Chicago	E. L. Compere	C	.....	1,882	1	1	1	1, 7	1	75.00
Cook County Hospital*[a1]	Chicago	E. G. Murphy	AF	533	7,737	19	..	3	1, 7	1½	32.00
Illinois Masonic Hospital*[a1]	Chicago	Fischer and Pease	AF	459	.....	..	..	..	.....	1½	.....
Mercy Hospital*	Chicago		F	.....	.....	..	..	..	.....	½	.....
Michael Reese Hospital*[a1]	Chicago	I. Wollin	AO	707	2,800	..	..	3	1/1, 7/1	2	25.00
Passavant Memorial Hospital*	Chicago		A	.....	.....	..	..	1	.....	1	.....
Research and Educational Hospitals*[a1]	Chicago	F. A. Chamblee	ACFS	636	5,598	..	..	6	7/1	3	50.00
St. Elizabeth Hospital*	Chicago	C. Scuderi	F	460	.....	..	..	1	.....	½	.....
St. Luke's Hospital*	Chicago	F. Hark	A	540	998	4	4	2	7/1	1	25.00
Shriners Hospital for Crippled Children	Chicago	H. A. Sofield	C	233	2,096	..	..	3	1/1	1	75.00
University of Chicago Clinics*[a1]	Chicago	C. H. Hatcher	ACFS	580	4,884	3	3	4	7/1	2	25.00
Wesley Memorial Hospital*[a1]	Chicago	E. L. Compere	AFS	1,220	.....	11	2	5	.....	2	25.00
Evanston Hospital*	Evanston, Ill.	V. C. Turner	AF	603	1,145	11	5	1	.....	1½	50.00
St. Francis Hospital*	Evanston, Ill.	J. J. Fahey	AF	469	.....	2	1	2	7/1	1½	75.00
West Suburban Hospital*	Oak Park, Ill.		AF	262	1,182	10	..	1	1, 7	1½	150.00
St. Francis Hosp. Inc.	Peoria, Ill.	H. E. Cooper	ACF	706	4,132	9	..	1	7	2½	150.00
Indianapolis General Hospital*	Indianapolis	L. L. Shuler	AF	783	8,015	48	12	4	7/1	1½	80.00
Indiana University Medical Center*[a1]	Indianapolis	G. J. Garceau	ACFS	926	8,859	6	3	6	7/1	3	68.33
Methodist Hospital*[a1]	Indianapolis	C. F. Thompson	AF	1,448	.....	23	10	2	7/1	1½	200.00
St. Vincent's Hospital*	Indianapolis	G. J. Garceau	AFS	1,001	3,092	18	6	2	7/1	2	200.00
Iowa Methodist Hospital*[a1]	Des Moines, Iowa	E. M. George	A	944	.....	13	6	1	7/1	1½	75.00
Mercy Hospital	Iowa City	A. Steindler	A	128	.....	..	..	1	.....	1	.....
University Hospitals*[a1]	Iowa City	A. Steindler	ACF	3,013	5,172	2	1	12	7/1	2½	50.00
University of Kansas Medical Center*	Kansas City, Kan.	J. B. Weaver	ACFS	603	5,416	11	6	3	7	3	.....
Kosair Crippled Children Hospital	Louisville, Ky.		C	.....	.....	..	..	..	.....	1	.....
Louisville General Hospital*	Louisville, Ky.	K. A. Fischer	AFS	509	5,919	22	6	2	7/1	2	.....
Charity Hospital of Louisiana*[a1]			ACFS	2,878	30,596	72	5	15	7/1	3	25.00
Louisiana State University Unit[1]	New Orleans	H. T. Simon	ACFS			(See Charity Hospital)				3	.....
Tulane University Unit[1]	New Orleans	G. A. Caldwell	ACFS			(See Charity Hospital)				3	.....
Ochsner Foundation Hospital[1,43]	New Orleans	G. A. Caldwell	AFS	301	6,319	1	1	4	1/1, 7/1	2	150.00
Touro Infirmary*	New Orleans	G. A. Caldwell	AO	420	1,118	2	2	2	.....	2	17.50
Shreveport Charity Hospital*	Shreveport, La.	T. M. Oxford	ACFS	1,829	6,095	26	9	9	7/1	3	60.00
Shriners' Hospital for Crippled Children	Shreveport, La.	G. D. Caldwell	C	.....	.....	..	..	1	.....	1	.....
Children's Hospital School	Baltimore		C	543	500	3	2	2	7/1	1	.....
James Lawrence Kernan Hospital and Industrial School for Crippled Children	Baltimore	A. F. Vosbell	C	316	5,022	4	..	2	5/1, 7/1	1	100.00
Johns Hopkins Hospital*	Baltimore	R. W. Johnson, Jr.	AFS	637	10,062	7	3	3	7/1	2	41.66
Boston City Hospital*[a1]	Boston	J. H. Shortell	AF	1,191	46,237	18	..	2	.....	1½	.....
Children's Hospital*[a1]	Boston	W. Green	CS	739	17,610	3	1	8	Varies	1½	.....
Lahey Clinic	Boston		AS	.....	.....	..	..	4	.....	1½	.....
Massachusetts General Hospital*[a29]	Boston	J. S. Barr	ACFS	648	.....	6	..	2	.....	3	.....
Peter Bent Brigham Hospital*	Boston		AF	(Included in Surgery)						1½	.....
†Massachusetts Hospital School[4]	Canton, Mass.		CF	.....	.....	..	..	..	.....	1½	.....
Shriners' Hospital for Crippled Children	Springfield, Mass.	C. deV. Hough	C	280	3,304	..	..	2	1/1	1	25.00
Worcester City Hospital*[a1]	Worcester, Mass.	J. W. O'Meara	ACFS	.....	.....	..	..	3	.....	3	.....
University Hospital*[a1]	Ann Arbor, Mich.	O. E. Badgley	ACFS	1,203	10,545	9	5	6	7/1	3	111.80
Children's Hospital[1,36]	Detroit	F. J. Fischer	C	270	3,370	..	..	2	.....	1	100.00
City of Detroit Receiving Hospital*[a1]	Detroit	A. D. LaPorte	F	827	9,024	28	12	2	7/1	½	188.00
Harper Hospital*[a1,35]	Detroit	A. D. LaPorte	A	757	905	5	2	2	7/1	1	.....
Henry Ford Hospital*[a1]	Detroit	C. L. Mitchell	ACFS	1,065	15,410	6	..	3	7/1	3	200.00

Numerical and other references will be found on page 225.

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15. ORTHOPEDIC SURGERY—Continued

Name of Hospital	Location	Chief of Service	Type of Training [14]	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1940)	Length of Approved Program (Years)	Beginning Stipend (Month)
Blodgett Memorial Hospital[a1]	Grand Rapids, Mich.	J. T. Hodgen	ACF	152	2,066	..	..	1	.....	2¼	$100.00
Borgess Hospital	Kalamazoo, Mich.		AF	.....	.....	..	..	1	.....	1½	.....
Shriners' Hospital for Crippled Children	Minneapolis	W. H. Cole	C	175	427	..	..	2	.....	1	.....
University of Minnesota Hospitals[a1]	Minneapolis	W. Cole	A	234	1,700	7	6	1	.....	1	.....
Mayo Foundation	Rochester, Minn.	R. K. Ghormley	ACFS	.....	.....	..	..	15	.....	3	92.50
Gillette State Hospital for Crippled Children [1]	St. Paul	C. C. Chatterton	C	636	6,200	2	2	4	7/1	1	100.00
Mississippi Baptist Hospital[a]	Jackson, Miss.	T. Blake	C	1,087	.....	15	..	1	.....	1	.....
University Hospitals	Columbia, Mo.	W. J. Stewart	C	67	1,254	..	..	1	.....	1	.....
Children's Mercy Hospital	Kansas City, Mo.	N. Pickard	C	262	3,193	..	..	2	.....	1	.....
Kansas City General Hospital No. 1[a]	Kansas City, Mo.	R. L. Diveley	AF	951	4,906	43	13	2	7/1	1½	50.00
St. Luke's Hospital[a1]	Kansas City, Mo.	R. Diveley and F. Dixon	ACF	492	.....	5	..	1	.....	2½	.....
Barnes Hospital[a]	St. Louis	J. A. Key	ACFS	801	3,681	12	7	2	7/1	3	25.00
St. Louis City Hospital[a1]	St. Louis		F	929	3,380	114	1	2	7/1	½	95.00
St. Mary's Group of Hospitals[a]	St. Louis	F. H. Albrecht	ACFS	499	3,633	8	3	5	7/1	3	35.00
Shriners Hospital for Crippled Children	St. Louis	C. H. Crego, Jr.	C	332	1,772	1	..	2	7/1	1	.....
Nebraska Orthopedic Hospital [1]	Lincoln, Neb.	H. W. Orr	C	753	2,252	10	..	2	7/26	1	.....
University of Nebraska Hospitals[a1]	Omaha	R. D. Schrock	ACFS	184	711	4	4	3	7/1	3	75.00
Jersey City Hospital[a1]	Jersey City, N. J.	H. C. Benjamin	ACF	751	10,696	44	5	3	.....	2½	.....
Monmouth Memorial Hospitals[a1,18]	Long Branch, N. J.	N. S. Ransonoff	ACF	880	2,074	14	9	3	.....	2½	100.00
Hospital for Crippled Children	Newark, N. J.	T. Nicola	AC	.....	.....	..	..	3	.....	2	.....
New Jersey Orthopaedic Hospital	Orange, N. J.	H. W. Smith	AC	800	14,849	4	3	2	1/1	2	90.00
Orthopaedic Hospital and Dispensary	Trenton, N. J.	R. B. Ernest	A	325	5,317	6	..	1	7/1	1	150.00
Carrie Tingley Hospital for Crippled Children	Hot Springs, N. Mex.	W. L. Minear	C	.....	.....	..	..	2	1/1	1	75.00
Albany Hospital[a]	Albany, N. Y.	A. H. Shoemaker	A	997	668	11	4	2	7/1	1	41.67
Binghamton City Hospital[a]	Binghamton, N. Y.	C. A. Allaben	AC	431	.....	1	..	1	7/1	2	100.00
House of St. Giles the Cripple	Brooklyn		C	.....	.....	..	..	1	.....	1	.....
Jewish Hospital[a1]	Brooklyn	Koven and Milgram	AFS	1,197	6,941	8	4	1	10	2	55.00
Kings County Hospital[a1]	Brooklyn	H. C. Fett	ACFS	499	7,652	6	2	3	7/1	3	80.00
Long Island College Hospital[a1]	Brooklyn	H. D. Fett	AFS	366	6,575	5	1	3	7/1	2	35.00
Methodist Hospital[a1]	Brooklyn	H. P. Lange	AF	447	816	4	2	1	.....	1½	.....
St. Charles Hospital Orthopedic Clinic	Brooklyn	H. D. Fett	C	224	1,871	3	2	3	7/1	1	100.00
Buffalo General Hospital[a]	Buffalo	F. N. Potts	AFS	719	694	16	5	6	7/1	2	25.00
Children's Hospital	Buffalo	F. N. Potts	C	265	.....	1	2	2	.....	1	50.00
Edward J. Meyer Memorial Hospital[a1]	Buffalo	P. Blanco	AFS	131	1,300	1	..	3	7/1	2	100.00
Millard Fillmore Hospitals[a]	Buffalo	J. P. Cole	A	678	.....	6	..	1	7/1	1	50.00
Meadowbrook Hospital[a]	Hempstead, N. Y.	O. C. Hudson	F	632	.....	51	29	1	7/1	½	115.00
Queens General Hospital[a1]	Jamaica, N. Y.	F. C. Courten	AFS	280	12,300	18	7	4	7/1	2	80.00
Nassau Hospital[a1]	Mineola, N. Y.		AF	1,053	.....	2	..	1	.....	1½	.....
Bellevue Hospital, Div. IV—Open Div.[a1]	New York City	A. Krida	AC	310	3,182	2	..	2	1, 7	2	60.00
Flower and Fifth Avenue Hospitals[a1]	New York City	A. H. Bingham	AF	305	1,000	3	..	1	.....	1½	.....
Hospital for Joint Diseases[a1,37]	New York City		ACFS	2,797	35,332	13	4	19	1/1	3	40.00
Hospital for Special Surgery	New York City	P. Wilson	ACFS	1,479	23,648	4	3	11	.....	3	50.00
Lenox Hill Hospital[a1]	New York City	W. Galland and A. Wiesenthal	AF	414	.....	6	1	2	7/1	1½	50.00
Metropolitan Hospital[a1]	New York City	M. J. Wilson	AFS	739	2,180	30	..	1	7/1	2	150.00
Mount Sinai Hospital[a1]	New York City	R. K. Lippmann	AFS	.....	.....	..	..	3	.....	2	50.00
Presbyterian Hospital[a1]	New York City	A. DeF. Smith	ACFS	1,776	65,193	3	..	25	.....	3	41.66
St. Luke's Hospital[a1,3]	New York City	H. Cleveland	ACFS	714	4,988	5	2	3	7/1	3	50.00
St. Charles Hospital for Crippled Children	Port Jefferson, N. Y.	F. S. Child	C	395	.....	1	..	2	.....	1	.....
Rochester General Hospital[a1]	Rochester, N. Y.	H. B. Crawford	A	889	1,452	14	10	1	7/1	1	70.00
Strong Memorial-Rochester Municipal Hospitals[a1,16]	Rochester, N. Y.	R. P. Schwartz	ACFS	857	5,031	..	..	7	7/1	3	45.00
Rehabilitation Hospital [1]	W. Haverstraw, N. Y.	J. C. McCauley, Jr.	AC	415	897	2	..	4	.....	2	200.00
Charlotte Memorial Hospital[a]	Charlotte, N. C.	H. Winkler	A	1,215	1,016	9	4	4	.....	1	.....
Duke Hospital[a1,13]	Durham, N. C.	L. D. Baker	ACFS	740	4,341	..	..	16	7/1	3	83.33
North Carolina Orthopedic Hospital	Gastonia, N. C.	W. M. Roberts	C	580	4,039	32	..	3	.....	1	.....
North Carolina Baptist Hospital[a1]	Winston-Salem, N. C.	R. A. Wilson	AFS	383	5,400	2	..	1	8/1	2	.....
Children's Hospital	Akron, Ohio	P. A. Doran	C	71	833	..	..	2	7/1	1	100.00
City Hospital[a]	Akron, Ohio		AF	507	418	28	6	4	7/1	1½	100.00
Children's Hospital	Cincinnati	J. A. Freiberg	C	.....	.....	..	..	..	.....	1	.....
Cincinnati General Hospital[a1]	Cincinnati	J. Freiberg	AFS	201	2,952	5	..	4	7/1	2	.....
Jewish Hospital[a]	Cincinnati	J. J. Freiberg	A	421	.....	9	6	1	7/1	1	75.00
Cleveland Clinic Hospital [1]	Cleveland	J. A. Dickson	ACFS	571	12,759	5	..	7	7/1	3	100.00
Mount Sinai Hospital[a]	Cleveland	R. S. Reich	AF	955	1,670	5	3	2	10/1	1½	65.00
St. Luke's Hospital[a]	Cleveland	T. A. Willis	AFS	1,077	2,252	19	5	2	6/25	2	60.00
University Hospitals[a1]	Cleveland	M. Harbin	ACFS	589	3,356	3	..	1	7/1	3	25.00
Children's Hospital	Columbus, Ohio	E. H. Wilson	C	436	3,589	3	..	2	.....	1	.....
Mount Carmel Hospital[a1]	Columbus, Ohio	E. H. Wilson	AF	1,119	2,081	20	4	1	1/1	1½	110.00
White Cross Hospital[a]	Columbus, Ohio	J. D. Wilson	AF	762	502	11	1	2	7	1½	100.00
St. Vincent's Hospital[a]	Toledo, Ohio	A. L. Bershon	ACFS	887	239	17	6	2	7	3	100.00
Youngstown Hospital[a]	Youngstown, Ohio	R. R. Morrall	AFS	1,251	1,429	34	11	3	7/1	2	100.00
Bone and Joint Hospital-McBride Clinic	Oklahoma City	E. D. McBride	A	1,504	31,224	12	3	4	7/1	1	150.00
St. Anthony's Hospital[a]	Oklahoma City	W. K. West	A	898	1,500	17	4	1	1/1	1	75.00
University Hospitals[a]	Oklahoma City	D. H. O'Donoghue	ACFS	938	6,965	9	..	4	7/1	3	35.00
Emanuel Hospitals[a1]	Portland, Ore.	H. E. Davis	AF	869	.....	1	..	3	7/1	1½	75.00
Shriners Hospital for Crippled Children	Portland, Ore.	L. S. Lucas	C	436	1,529	..	..	2	.....	1	.....
University of Oregon Medical School Hospitals and Clinics[a1]	Portland, Ore.	L. S. Lucas	AFS	443	5,463	32	19	7	7/1	2	75.00
State Hospital for Crippled Children	Elizabethtown, Pa.		C	204	1,945	1	1	2	7/1	1	192.50
Hamot Hospital[a1]	Erie, Pa.	A. G. Davis	AF	1,379	1,330	19	11	2	12/15	1½	150.00
Children's Hospital of Philadelphia [1]	Philadelphia, Pa.	J. T. Nicholson	C	157	2,123	..	..	1	.....	1	.....
Graduate Hospital of the University of Pennsylvania[a]	Philadelphia		AS	156	1,383	2	..	1	7/1	1½	.....
Hahnemann Hospital[a1]	Philadelphia	E. D. Geckeler	AFS	612	4,815	4	2	5	.....	2	25.00
Hospital of the University of Pennsylvania[a1]	Philadelphia	P. C. Colonna	ACFS	562	4,930	4	3	7	Varies	3	20.00
Jefferson Medical College Hospital[a]	Philadelphia	J. R. Martin	AFS	589	4,862	11	4	7	7/1	2	.....
Philadelphia General Hospital[a1]	Philadelphia		ACFS	753	.....	112	..	5	7/1	3	70.00
Shriners Hospital for Crippled Children [1]	Philadelphia	J. R. Moore	C	230	2,623	1	..	2	7/1	1	50.00
Temple University Hospitals[a1]	Philadelphia	J. R. Moore	AFS	958	3,912	18	6	4	7/1	2	.....
Allegheny General Hospital[a]	Pittsburgh	P. B. Steele	AFS	958	1,908	11	2	2	7/1	3	100.00
Children's Hospital [1]	Pittsburgh	W. O. Markell	C	312	2,755	..	..	1	7	1	45.00
Presbyterian Hospital[a1]	Pittsburgh	J. S. Donaldson	AFS	312	.....	..	..	1	.....	2	46.67
St. Francis Hospital[a]	Pittsburgh	C. O. Yount	A	284	3,182	1	1	1	7/1	1	100.00
Reading Hospital[a1]	Reading, Pa.	E. J. Morrissey	AF	592	559	22	11	1	7/1	1½	100.00
Robert Packer Hospital[a]	Sayre, Pa.	G. Hammond	ACFS	850	4,553	27	17	3	7/1	3	150.00
Rhode Island Hospital[a1]	Providence, R. I.	H. McCusker	ACFS	598	3,282	2	..	1	.....	3	.....
Roper Hospital[a1]	Charleston, S. C.	F. A. Hoshall	ACFS	748	3,033	6	2	2	7/1	3	25.00

Numerical and other references will be found on page 225.

15. ORTHOPEDIC SURGERY—Continued

Name of Hospital	Location	Chief of Service	Type of Training [14]	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
Columbia Hospital[a1]	Columbia, S. C.	W. A. Boyd	AC	1,190	5,788	17	..	1	7/1	2	$ 75.00
Greenville General Hospital[a1]	Greenville, S. C.	J. W. White	AF	717	1,200	1	..	1	7/1	1½	100.00
Shriners Hospital for Crippled Children [b]	Greenville, S. C.		C	318	1,764	..	2	7/1	1	1	100.00
Baroness Erlanger Hospital[a1]	Chattanooga, Tenn.		AF	1,064	1,322	22	4	1	.....	1½	.....
Willis C. Campbell Clinic Hospital	Memphis, Tenn.	J. S. Speed	ACFS	1,804	17,560	13	..	12	1/1, 7/1	3	50.00
Baylor University Hospital[a1]	Dallas, Texas.	F. L. Butte	A	840	617	5	1	2	7/1	1	50.00
Parkland Hospital	Dallas, Texas.		F	.....	.....	..	..	2	.....	½	.....
Texas Scottish Rite Hospital for Crippled Children	Dallas, Texas.	B. Carrell	C	651	4,982	1	..	4	7/1	1	75.00
Harris Hospital[a1]	Fort Worth, Texas.	C. F. Clayton	AF	528	2,710	1	..	1	7/1	1½	100.00
University of Texas Medical Branch Hospitals[a]	Galveston, Texas.	G. W. N. Eggers	AFS	526	4,439	8	4	3	7	2	50.00
Hermann Hospital[a]	Houston, Texas.	E. T. Smith	AF	463	926	5	2	3	.....	1½	50.00
Jefferson Davis Hospital[a1]	Houston, Texas.	J. M. Mitchner	F	698	3,279	21	4	1	7/1	½	50.00
Methodist Hospital[a1]	Houston, Texas.		C	378	1,010	3	..	1	.....	1	.....
St. Joseph's Infirmary[a]	Houston, Texas.	J. B. Foster	AF	3,311	5,130	39	10	1	.....	1½	.....
Scott and White Hospital[a]	Temple, Texas.		AF	.....	.....	..	..	1	.....	1½	.....
St. Mark's Hospital[a1,2]	Salt Lake City, Utah.	P. A. Pemberton	C	778	101	..	..	1	10/1	1	100.00
Salt Lake County General Hospital[a1]	Salt Lake City, Utah.		FS	(Included in Surgery)						1	.....
University of Virginia Hospital[a1]	Charlottesville, Va.	R. Funsten	ACFS	580	4,025	6	2	4	7/1	3	41.33
Crippled Children's Hospital [b]	Richmond, Va.		C	.....	.....	..	..	2	.....	1	.....
Medical College of Virginia, Hospital Division[a1]	Richmond, Va.	H. P. Mauck	AFS	1,264	3,620	20	5	6	7/1	2	46.50
Children's Orthopedic Hospital [a2]	Seattle.	J. LeCocq	C	560	4,900	1	1	2	.....	1	.....
King County Hospital[a2]	Seattle.	R. Anderson	AF	833	5,004	36	4	1	7/1	1½	90.00
Providence Hospital[a1,2]	Seattle.	I. O. McLemore	A	594	.....	1	..	1	7/1	1	100.00
Swedish Hospital[a2]	Seattle.	J. LeCocq	AF	1,066	.....	..	..	1	.....	1½	.....
Shriners' Hospital for Crippled Children	Spokane, Wash.	N. R. Brown	C	98	716	..	..	1	7	1	.....
Charleston General Hospital[a1]	Charleston, W. Va.	G. Miyakawa	AF	886	6,174	7	4	2	7/1	1½	100.00
St. Mary's Hospital[a]	Huntington, W. Va.	F. A. Scott	AF	973	747	5	2	1	4/1	1½	100.00
Morris Memorial Hospital	Milton, W. Va.	C. B. Smith	C	414	40	..	..	2	7/1, 11/1	1	100.00
State of Wisconsin General Hospital[a1]	Madison, Wis.	R. E. Burns	ACFS	1,340	5,688	15	9	5	7	3	25.00
Columbia Hospital[a]	Milwaukee, Wis.	H. C. Schumm	AFS	597	.....	5	4	3	.....	2	.....
Milwaukee Children's Hospital	Milwaukee, Wis.	A. C. Schmidt	C	.....	.....	..	..	7	.....	1	.....
Shriners Hospital for Crippled Children	Honolulu, Hawaii.	R. N. Hatt	C	186	3,761	1	..	1	1/1	1	.....

16. OTOLARYNGOLOGY

(See Ophthalmology)

17. PATHOLOGY

The services listed below are approved by the Council and the American Board of Pathology. These programs presently are being reappraised in accordance with the plan of training announced by the Board on February 1, 1949.

Services which have been evaluated on the basis of training in the two categories, pathologic anatomy and clinical pathology, are designated as follows: pathologic anatomy only—a; clinical pathology only—c; pathologic anatomy and clinical pathology—p. Training in hospitals which are not so designated in this list will be evaluated by the Board on an individual basis (at the time of application for certification).

Hospitals, 403; Assistant Residencies and Residencies, 1,017

Name of Hospital	Location	Chief of Service	Inpatients Treated [c]	Surgical Specimens	Number Examined Microscopically	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Length of Approved Program (years)	Beginning Stipend (Month)
United States Army										
Letterman General Hospital[a]	San Francisco.	K. F. Ernest	10,628	3,838	3,543	115	4	.....	3	n
Fitzsimons General Hospital[a]	Denver.	H. W. Mahon	15,510	2,960	2,960	182	3	.....	3	n
Army Institute of Pathology [1]	Washington, D. C.	H. F. Smetana	.....	26,803	26,803	7,081	1	.....	1[a]	n
Walter Reed General Hospital[a]	Washington, D. C.	V. H. Cornell	10,478	5,405	5,324	186	3	1, 7	3	n
Oliver General Hospital[a]	Augusta, Ga.	J. M. Blumberg	8,250	4,436	4,436	36	3	1/1, 7/1	3	n
Brooke General Hospital[a]	San Antonio, Texas.	E. DeCoursey	29,218	3,668	3,668	256	4	.....	3	n
Gorgas Hospital[a]	Ancon, C. Z.	F. A. Mantz	11,773	2,555	2,555	201	4	7/1	3	n
United States Navy										
U. S. Naval Hospital[a]	Long Beach, Calif.	J. L. Zundell	21,186	3,382	3,382	196	2	Varies	3	n
U. S. Naval Hospital[a]	Oakland, Calif.	J. S. Shaver	17,320	.....	.....	190	3	.....	3	n
U. S. Naval Hospital[a]	San Diego, Calif.	A. W. Eaton	21,354	2,785	2,785	203	3	.....	3	n
U. S. Naval Hospital[a]	Bethesda, Md.	W. M. Silliphant	15,573	5,449	.....	232	2	.....	3	n
U. S. Naval Hospital	Brooklyn.		.....	.....	.....	...	2	.....	1	n
U. S. Naval Hospital[a]	St. Albans, N. Y.	D. J. Cracovaner	7,238	1,430	910	99	4	.....	3	n
U. S. Naval Hospital[a]	Philadelphia.	T. W. Bennett	16,335	2,376	2,376	242	3	.....	3	n
United States Public Health Service										
U. S. Marine Hospital[a1]	New Orleans.	L. L. Swan	6,724	2,213	1,729	75	1	7/1	2[p]	n
U. S. Marine Hospital[a1]	Baltimore.	C. H. Binford	8,474	14,532	14,532	151	2	7/1	3	n
National Institute of Health	Bethesda, Md.		.....	.....	.....	...	..	.....	1[a]	.....
U. S. Marine Hospital	New York City.	L. Winkelman	5,012	.....	.....	19	..	.....	2[p]	n
U. S. Marine Hospital[a1]	Stapleton, S. I., N. Y.	I. H. Sophian	12,052	2,278	2,278	94	3	7/1	2[p]	n
U. S. Marine Hospital[a]	Seattle, Wash.	G. E. Tooley	5,536	1,272	809	130	1	7/1	2[p]	n
Veterans Administration										
Veterans Admin. Hospital [1]	Los Angeles.	L. Kaplan	13,561	9,697	7,696	456	8	.....	3	n
Veterans Admin. Hospital [1]	Van Nuys, Calif.	B. E. Konwaler	7,961	4,733	4,733	224	2	1/1, 7/1	3	n
Veterans Admin. Hospital [1]	Washington, D. C.	H. Rapapport	3,480	1,303	1,121	106	3	7/1	3	n
Veterans Admin. Hospital [1]	Chamblee, Ga.	L. N. Foster	6,451	1,999	1,999	154	2	7/1	2[a], 3[c]	n
Veterans Admin. Hospital	Hines, Ill.	K. Costich	23,682	5,599	5,599	586	2	.....	3	n
Veterans Admin. Hospital [1]	Indianapolis, Ind.	D. Rosenbaum	4,889	.....	.....	127	..	.....	2[p]	n
Veterans Admin. Hospital [1]	Des Moines, Iowa.	K. R. Cross	5,351	1,590	1,590	139	3	7	3	n
Veterans Admin. Center [1]	Wadsworth, Kan.	C. J. Weber	8,062	2,945	2,008	270	4	1, 7	4[p]	n

Numerical and other references will be found on page 225.

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17. PATHOLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated [a]	Surgical Specimens	Number Examined Microscopically	Autopsies	Asst. Res. and Fellowships Offered [b]	Beginning of Service (Year)	Length of Required Program (years)	Beginning Stipend (Month)	
Veterans Admin. Hospital	Louisville, Ky.	H. Gordon	9,570	3,648	3,643	151	2	.....	3P	n	
Veterans Admin. Hospital [1]	New Orleans, La.	J. Ziskind	5,204	1,548	1,548	127	4	7/1	2	n	
Veterans Admin. Hospital	Fort Howard, Md.	W. B. Van de Grift	2,677	700	700	129	2	.....	2P	n	
Veterans Admin. Hospital [1]	Boston	J. D. Houghton	5,744	1,955	1,897	137	2	7	2P	n	
Veterans Admin. Hospital [1]	Framingham, Mass.	R. Feinberg	6,155	2,057	2,032	136	2	7/1	2	n	
Veterans Admin. Hospital	Dearborn, Mich.	H. J. Linn	6,048	1,906	1,890	209	1	7/1	2P	n	
Veterans Admin. Hospital	Minneapolis, Minn.	W. Subby	10,144	3,946	3,866	202	5	.....	4P	n	
Veterans Admin. Hospital [1]	Jefferson Bks., Mo.	.....	7,735	2,780	2,530	179	2	.....	4P	n	
Veterans Admin. Hospital	New York City	B. Gordon	9,977	4,215	4,215	314	3	7	4P	n	
Veterans Admin. Hospital [1]	Staten Island, N. Y.	O. Auerbach	5,290	2,736	2,736	130	3	7/1	1	n	
Veterans Admin. Hospital	Oteen, N. C.	S. Bornstein	4,060	.....	.....	124	..	.....	1P	n	
Veterans Admin. Hospital [1]	Cleveland	J. R. Kahn	8,698	5,641	5,641	101	1	.....	3P	n	
Veterans Admin. Hospital	Aspinwall, Pa.	G. J. Brimyer	7,550	88	1,412	229	2	7/1	4P	n	
Veterans Admin. Hospital	Columbia, S. C.	.....	6,263	970	164	114	..	.....	3P	n	
Veterans Admin. Hospital	Memphis, Tenn.	D. J. Greiner	10,245	3,826	3,282	187	3	7/1	4P	n	
Veterans Admin. Hospital	Nashville, Tenn.	S. H. Auerbach	6,087	1,455	1,309	64	1	7/1	1P	n	
Veterans Admin. Hospital [1]	Dallas, Texas	J. Furth	3,483	.....	74	.....	1	.....	3P	n	
Veterans Admin. Hospital [1]	McKinney, Texas	O. J. Wollenman	5,095	1,357	1,357	115	3	.....	2P	n	
Veterans Admin. Hospital	Salt Lake City	E. J. Eichwald	3,129	1,119	1,096	90	2	7	1P	n	
Veterans Admin. Hospital	Richmond, Va.	J. R. Kriz	7,346	1,748	1,748	134	1	7/1	2P	n	
Veterans Admin. Center [1]	Milwaukee, Wis.	J. M. Lubitz	7,887	2,027	1,678	229	2	.....	4P	n	
Nonfederal											
Baptist Hospital [1]	Birmingham, Ala.	A. E. Casey	8,434	4,368	4,254	69	2	7/1	4P	$200.00	
Jefferson-Hillman Hospital [a1]	Birmingham, Ala.	R. D. Baker	21,818	4,090	4,087	396	4	.....	4P	.....	
Employees' Hospital of the Tennessee Coal, Iron and R.R. Company*	Fairfield, Ala.	L. C. Posey and J. A. Cunningham	8,675	1,502	1,485	145	1	7/1	1P	225.00	
University Hospital* [1]	Little Rock	A. Nettleship	4,392	4,380	4,380	127	5	7/1	3	.....	
Kern General Hospital [1]	Bakersfield, Calif.	J. D. Kirshbaum	.....	2,440	1,704	.....	1	7/1	4	.....	
Herrick Memorial Hospital* [a1]	Berkeley, Calif.	H. R. Fishback	7,241	.....	.....	124	..	.....	2P	.....	
Glendale Sanitarium and Hospital*	Glendale, Calif.	A. F. Brown	7,506	1,750	1,312	86	1	7/1	1P	160.00	
Loma Linda Sanitarium and Hospital*	Loma Linda, Calif.	C. S. Small	5,003	2,485	2,237	63	6	7/1	3P	150.00	
California Hospital* [1]	Los Angeles	A. Wright	14,418	5,789	4,302	159	1	7/1	3P	200.00	
Cedars of Lebanon Hospital* [1]	Los Angeles	N. B. Friedman	11,224	5,226	4,691	163	2	.....	3P	50.00	
Childrens Hospital*	Los Angeles	R. E. Kutti	6,050	439	419	140	2	.....	1P	.....	
Hospital of the Good Samaritan* [a1]	Los Angeles	R. W. Hammack and G. D. Maner	12,249	4,741	2,709	131	1	.....	1P	.....	
Los Angeles County Hospital* [a1]	Los Angeles	E. M. Butt	62,163	8,485	7,615	1,804	6	Varies	3P	165.00	
Queen of Angels Hospital*	Los Angeles	A. R. Cameron	5,145	5,145	3,685	215	..	.....	3	.....	
St. Vincent's Hospital*	Los Angeles	J. E. Kahler	17,586	3,345	2,728	124	1	7/1	1	.....	
White Memorial Hospital* [a1]	Los Angeles	O. B. Pratt	9,174	5,300	3,499	126	3	7/1	3	140.00	
Highland-Alameda County Hospital* [a1]	Oakland, Calif.	R. J. Parsons	11,433	1,975	1,912	362	3	.....	3	100.00	
Permanente Foundation Hospital* [a1]	Oakland, Calif.	M. Friedman	11,572	4,387	3,037	148	1	.....	3	.....	
Colis P. and Howard Huntington Memorial Hospital*	Pasadena, Calif.	A. G. Foord	9,482	6,341	5,430	216	3	Varies	3	.....	
Mercy Hospital*	San Diego, Calif.	D. A. DeSanto	13,316	.....	.....	98	1	7/1	1	150.00	
San Diego County General Hospital*	San Diego, Calif.	H. A. Ball	8,754	1,479	1,264	248	1	7/1	1	125.00	
French Hospital* [a1]	San Francisco	G. Watson	6,674	2,179	2,043	86	1	7	1	.....	
Mount Zion Hospital*	San Francisco	H. R. Bickford	6,725	2,207	1,579	125	2	7/1	1	50.00	
San Francisco Hospital	San Francisco	J. L. Carr	20,702	.....	.....	396	2	.....	..	175.00	
Stanford University Hospital* [a1]	San Francisco	A. J. Cox	11,598	2,436	2,436	144	3	7/1	3	50.00	
University of California Hospital* [a1]	San Francisco	J. F. Rinehart	7,891	3,615	3,615	158	2	7/1,8/1,9/1	..	50.00	
Santa Clara County Hospital*	San Jose, Calif.	D. J. Stump	5,809	1,839	1,088	208	1	7/1	2P	225.00	
Santa Barbara County Hospital* [a1]	Santa Barbara, Calif.	F. O. Russell	9,484	3,415	2,032	113	2	7/1	3	100.00	
Glockner-Penrose Hospital* [a10]	Colorado Spgs., Colo.	.....	.....	.....	.....	.....	..	.....	1P	.....	
Children's Hospital [1]	Denver	H. D. Palmer	10,394	2,556	2,478	106	1	5	3P	50.00	
Presbyterian Hospital*	Denver	A. E. Lubehenco	7,339	.....	.....	118	..	.....	1P	.....	
St. Luke's Hospital*	Denver	W. C. Black	11,144	8,266	4,811	124	1	5/1	1P	50.00	
University of Colorado Medical Center	Denver	.....	.....	.....	.....	.....	..	.....	4P	.....	
Colorado General Hospital* [a1]	Denver	J. B. McNaught	4,913	2,179	2,159	270	7	7/1	..	95.00	
Denver General Hospital* [a28]	Denver	A. Lapi	10,585	1,780	4,165	395	2	.....	..	40.00	
Colorado State Hospital [1]	Pueblo, Colo.	M. Gallavan	1,089	228	226	186	3	.....	1	275.00	
Bridgeport Hospital*	Bridgeport, Conn.	I. B. Akerson	10,025	3,086	3,086	162	1	1/1	3	100.00	
Hartford Hospital* [1]	Hartford, Conn.	R. E. Kendall	22,110	9,025	8,255	363	3	7/1	3	50.00	
St. Francis Hospital*	Hartford, Conn.	L. P. Hastings	18,024	4,773	4,170	166	3	1, 7	1	75.00	
New Britain General Hospital* [a1]	New Britain, Conn.	P. D. Rosahn	7,377	2,056	923	101	2	.....	3	75.00	
Grace-New Haven Community Hospital New Haven Unit (University Service)* [a1]	New Haven, Conn.	A. Snoke	11,336	4,769	4,500	354	8	7/1	3	40.00	
Hospital of St. Raphael*	New Haven, Conn.	R. R. Nesbit	11,838	2,845	2,656	107	..	.....	2P	.....	
Norwalk Hospital*	Norwalk, Conn.	R. N. Barnett	7,902	2,120	2,006	100	2	7/1	1	155.00	
Stamford Hospital* [a1]	Stamford, Conn.	J. G. Snavely	7,199	2,269	1,742	179	..	.....	3P	.....	
Waterbury Hospital* [1]	Waterbury, Conn.	J. O. Collins	12,773	8,000	5,376	162	..	7/1	2P	100.00	
Delaware Hospital*	Wilmington, Del.	J. W. Leonard	9,839	3,611	3,862	183	2	7/1	1	90.00	
Memorial Hospital*	Wilmington, Del.	J. W. Hooker	5,852	2,311	2,311	142	1	7/1	2	110.00	
Children's Hospital	Washington, D. C.	.....	7,709	403	278	118	2	7/1	1	50.00	
Doctors' Hospital*	Washington, D. C.	O. B. Hunter	8,839	4,279	3,246	102	1	.....	1	.....	
Gallinger Municipal Hospital* [a1]	Washington, D. C.	A. R. Monaco	22,566	2,495	2,540	600	1	7/1	3	.....	
Garfield Memorial Hospital* [1]	Washington, D. C.	F. C. Rice	10,251	.....	.....	100	1	.....	3	.....	
Georgetown University Hospital* [a1]	Washington, D. C.	C. G. Geschickter	8,274	1,726	1,726	108	12	.....	3	.....	
George Washington University Hospital* [a1]	Washington, D. C.	T. M. Peery	3,941	1,611	1,611	59	3	7/1	3	50.00	
Providence Hospital*	Washington, D. C.	H. H. Leffler	11,331	3,569	2,639	230	1	.....	3	75.00	
Sibley Memorial Hospital* [a1]	Washington, D. C.	O. B. Hunter	11,881	3,929	3,655	202	1	7/1	..	100.00	
St. Vincent's Hospital*	Jacksonville, Fla.	M. A. Murray	9,695	3,528	2,691	93	..	.....	1	.....	
Jackson Memorial Hospital* [a1]	Miami, Fla.	F. R. Rezek	17,904	4,584	3,048	408	3	7/1	3	60.00	
Crawford W. Long Memorial Hospital* [a1]	Atlanta, Ga.	D. Ayer	17,129	4,347	4,265	100	3	7/1	4P	75.00	
Grady Memorial Hospital* [a1]	Atlanta, Ga.	W. Sheldon	17,490	5,274	5,274	562	3	7/1	3	.....	
University Hospital*	Augusta, Ga.	W. L. Shepeard and E. R. Pund	15,311	3,206	2,833	93	1	.....	3	.....	
Emory University Hospital*	Emory University, Ga.	W. Sheldon	9,555	2,689	2,689	150	4	.....	3	.....	
Alexian Brothers' Hospital*	Chicago	J. P. Simonds	4,823	.....	.....	96	..	.....	1P	.....	
Augustana Hospital*	Chicago	G. Milles	8,074	3,463	2,507	166	1	7/1	3P	50.00	
Children's Memorial Hospital [1]	Chicago	J. P. Simonds	4,532	316	316	105	1	1	1	77.50	
City of Chicago Municipal Tuberculosis Sanitarium	Chicago	G. W. Drymalski	1,385	610	844	144	2	.....	1	.....	
Cook County Hospital* [a1]	Chicago	H. Popper	80,962	7,852	7,459	1,356	23	1, 7	3	32.60	

Numerical and other references will be found on page 225.

17. PATHOLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated*	Surgical Specimens	Number Examined Microscopically	Autopsies	Asst. Res. and Residencies Offered*	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
Englewood Hospital*	Chicago	L. Grams	7,459	1,575	1,497	61	..	.....	..	.....
Grant Hospital*[1]	Chicago	C. C. Mason and H. A. Grimm	7,698	3,300	3,000	133	1	7/1	2P	$145.00
Illinois Masonic Hospital*[1]	Chicago	L. S. King	7,578	2,021	1,959	185	3	.....	2P	.....
Mercy Hospital-Loyola University Clinics*	Chicago	E. Loeffler	9,901	3,145	2,785	129	1	.....	3	25.00
Michael Reese Hospital*[1]	Chicago	O. Saphir	16,267	4,859	4,859	421	15	1/1, 7	3	25.00
Mount Sinai Hospital*[1]	Chicago	I. Davidsohn	9,005	5,017	4,174	155	3	2, 7	3P	50.00
Norwegian-American Hospital*[1]	Chicago	A. Lenarer	6,072	2,356	1,700	82	1	7	1	150.00
Passavant Memorial Hospital*	Chicago	M. Wheelock	6,320	1,989	1,989	89	2	.....	3	.....
Presbyterian Hospital*	Chicago	G. M. Hass	12,374	4,524	4,524	213	2	.....	3	50.00
Provident Hospital*[1]	Chicago	E. F. Hirsch	5,900	1,183	1,183	103	1	.....	1	.....
Ravenswood Hospital*[1]	Chicago	.....	.....	1,900	1,753	....	1	1/1, 7/1	2P	60.00
Research and Educational Hospitals*[1]	Chicago	G. A. Bennett	6,784	3,335	3,335	177	3	7/1	3	65.00
St. Luke's Hospital*	Chicago	E. F. Hirsch	15,538	6,914	6,300	289	8	.....	3	.....
University of Chicago Clinics*[1]	Chicago	F. R. Cannon	12,845	4,454	3,916	261	2	7/1	3	25.00
Wesley Memorial Hospital*[1]	Chicago	T. C. Lappdy	15,699	4,024	4,017	246	5	.....	4P	25.00
Evanston Hospital*	Evanston, Ill.	J. C. Meanier	8,040	2,542	2,336	178	2	.....	3	50.00
St. Francis Hospital*	Evanston, Ill.	J. W. Henry	11,282	3,751	2,577	144	1	7/1	3	75.00
Methodist Hospital of Central Illinois*	Peoria, Ill.	D. O. Mansmardt	7,191	5,019	3,484	69	1	7/1	1	150.00
St. Francis Hospital*[1]	Peoria, Ill.	J. E. Kraus	14,582	4,359	2,817	231	1	7	3	150.00
St. Anthony's Hospital*	Rockford, Ill.	.....	.....	.....	.....	..	..	.....	3P	.....
St. Joseph Hospital*[1]	Fort Wayne, Ind.	S. M. Ralson	3,106	2,846	2,342	100	2	1, 7	2P	125.00
Indianapolis General Hospital*	Indianapolis	W. Dubun	10,506	2,261	2,210	302	2	7/1	3	150.00
Indiana University Medical Center*[1]	Indianapolis	J. L. Arbogast	9,847	3,492	3,412	326	8	7/1	3	68.33
Methodist Hospital*[1]	Indianapolis	H. M. Banks	22,505	.....	.....	205	2	7/1	3	200.00
St. Elizabeth Hospital*	LaFayette, Ind.	J. M. Alexander	8,042	1,773	1,676	119	2	7/1	1	100.00
Ball Memorial Hospital*[1]	Muncie, Ind.	L. Montgomery	5,321	5,016	5,016	216	3	7/1	4P	150.00
Memorial Hospital*[1,18]	South Bend, Ind.	A. S. Giordano	8,059	1,590	1,590	127	..	.....	3	150.00
Broadlawns Polk County Hospital*[1]	Des Moines, Iowa	J. L. Mossberger	5,072	1,660	1,162	119	..	.....	1P	.....
Iowa Methodist Hospital*[1]	Des Moines, Iowa	R. F. Birge	11,506	5,340	5,315	183	2	7/1	3	75.00
Mercy Hospital*[1]	Des Moines, Iowa	F. C. Coleman	8,228	2,124	2,124	123	1	7/1	3P	100.00
University Hospitals*[1]	Iowa City	E. D. Warner	27,353	4,597	4,597	294	3	7/1	3	50.00
University of Kansas Medical Center*	Kansas City, Kan.	H. R. Wahl	8,528	5,749	4,453	243	4	.....	3	.....
St. Francis Hospital*	Wichita, Kan.	C. A. Hellwig	14,879	8,143	8,143	151	1	.....	3	125.00
Louisville General Hospital*	Louisville, Ky.	A. J. Amiet	8,369	2,065	2,061	184	3	7/1	3	45.00
Charity Hospital of Louisiana*[1]	New Orleans	E. Moss	44,373	10,438	10,438	804	10	7/1	3	25.00
Hotel Dieu, Sisters' Hospital*	New Orleans, La.	R. M Hartwell	13,368	4,475	4,475	163	..	.....	4P	.....
Southern Baptist Hospital*[1]	New Orleans	E. Lawson	13,652	5,898	5,898	139	3	7/1	3P	150.00
Touro Infirmary*	New Orleans	A. Hertzog	14,234	4,846	4,846	183	3	.....	3	17.50
Shreveport Charity Hospital*	Shreveport, La.	R. W Mathews	4,833	3,201	3,201	277	1	.....	1	.....
Eastern Maine General Hospital*[1]	Bangor, Me.	R. W. Wadsworth	8,006	5,077	4,376	113	2	7/1	2P	50.00
Maine General Hospital*	Portland, Me.	J. E. Porter	8,401	4,285	4,285	118	2	.....	3	.....
Baltimore City Hospitals*[1]	Baltimore	C. G. Warner	7,407	1,141	1,141	397	2	7/1	3	15.00
Johns Hopkins Hospital*	Baltimore	A. K. Rech	19,898	5,931	.....	515	3	7/1	3	41.66
Sinai Hospital*[1]	Baltimore	T. Weinberg	9,369	3,575	3,575	180	1	7/1	3	25.00
Union Memorial Hospital*	Baltimore	W. C. Merkel	9,261	2,164	2,164	183	..	.....	3P	.....
University Hospital*[1]	Baltimore	H. R. Spencer	10,688	5,550	5,550	264	..	.....	3P	.....
Beverly Hospital*	Beverly, Mass.	D. E Brown	5,206	1,384	1,384	131	1	1/1	3	50.00
Beth Israel Hospital*[1]	Boston	M. J. Schlesinger	5,781	3,363	3,363	141	1	10/1	3	79.16
Boston City Hospital*[1]	Boston	J. Parker, Jr.	56,421	5,431	5,431	944	5	.....	3	.....
Boston Lying-In Hospital[24]	Boston	A. T. Hertig	2,971	1,709	1,709	35	2	1/1	1	50.00
Children's Hospital*[1]	Boston	S. Farber	9,250	1,514	1,514	245	12	Varies	..	41.67
Massachusetts General Hospital*	Boston	T. B. Mallory	7,390	10,213	.....	291	3	.....	3	.....
Massachusetts Memorial Hospitals*[1]	Boston	R. Osgood	8,149	2,725	2,719	139	3	7/1	3	50.00
New England Deaconess Hospital	Boston	R. Warren	7,624	8,857	8,857	110	3	.....	3	.....
Peter Bent Brigham Hospital*	Boston	A. R. Moritz	5,133	2,100	2,100	150	3	.....	3	.....
St. Elizabeth Hospital*	Boston	J. J. Larkin	7,127	2,260	1,844	74	1	.....	1	.....
Cambridge City Hospital*	Cambridge	R. Z. Schuz	5,724	1,149	1,149	165	1	7/1	1	58.33
Mount Auburn Hospital*[1]	Cambridge, Mass.	H. E. MacMahon	6,831	2,136	2,136	100	1	1/1	1	.....
Lawrence General Hospital*[1]	Lawrence, Mass.	S. Joffine	5,063	1,502	1,350	95	1	7/1	1a	100.00
Lynn Hospital*	Lynn, Mass.	H. Olken	7,900	.....	.....	102	..	.....	1a	.....
Salem Hospital*	Salem, Mass.	D. A. Nickerson	6,800	1,696	1,696	79	4	.....	3	50.00
Pondville Hospital	Walpole, Mass.	S. Warren	800	1,155	1,155	43	2	.....	1	.....
Worcester City Hospital	Worcester, Mass.	R. H. Goodale	10,360	.....	.....	267	3	7/1, 1/1	4P	50.00
Worcester State Hospital	Worcester, Mass.	.....	889	99	99	36	1	.....	3	.....
University Hospital*[1]	Ann Arbor, Mich.	C. V. Weller	17,348	963	963	433	3	7/1	3	111.80
Leila Y. Post Montgomery Hospital*[1]	Battle Creek, Mich.	G. W. Schein	7,401	3,025	3,025	60	1	.....	1	.....
City of Detroit Receiving Hospital*[1]	Detroit	O. A. Briens	17,570	3,719	3,719	500	4	.....	4P	.....
Grace Hospital*	Detroit	C. O. Owen	27,178	12,624	12,624	265	2	7/1	3	75.00
Harper Hospital*[1]	Detroit	P. F. Morse	20,937	10,570	10,570	185	3	.....	3	.....
Henry Ford Hospital*[1]	Detroit	F. W. Hartman	17,224	5,852	5,852	204	3	.....	3	.....
Herman Kiefer Hospital	Detroit	W. L. Brosius	7,927	405	405	160	1	7/1	1	368.00
Providence Hospital	Detroit	D. H. Kaump	13,091	3,830	3,830	271	2	7/1	3	140.00
St. Mary's Hospital*	Detroit	M. E. Maun	9,401	2,507	2,458	110	1	.....	3	.....
Woman's Hospital*[1]	Detroit	D. Beaver	9,498	4,134	3,928	89	1	.....	1	.....
Wayne County General Hospital and Infirmary*[1]	Eloise, Mich.	S. E. Gould	7,923	3,326	3,326	496	2	7/1	3	235.00
Hurley Hospital*	Flint, Mich.	G. R. Backus and R. J. Jermstad	15,774	4,915	3,146	158	1	.....	3	.....
Blodgett Memorial Hospital*[1]	Grand Rapids, Mich.	C. A. Payne	5,956	4,198	3,974	95	1	7	1	100.00
Butterworth Hospital*[1]	Grand Rapids, Mich.	P. A. VanPernis	11,481	5,164	2,623	162	1	7/1	1	100.00
St. Luke's Hospital*	Duluth, Minn.	A. H. Wells	10,160	.....	.....	288	1	.....	3	.....
St. Mary's Hospital*	Duluth, Minn.	W. V. Knoll	10,000	5,589	5,539	192	1	7/1	1	100.00
Minneapolis General Hospital*[1]	Minneapolis	S. S. Barron	9,192	2,065	1,525	386	1	1/1, 7/1	3	115.00
Northwestern Hospital*	Minneapolis	S. Lofsness	10,473	.....	.....	120	1	7/1	3	150.00
St. Barnabas Hospital*[1]	Minneapolis	N. Lufkin	8,544	2,387	1,913	184	..	.....	2P	.....
Swedish Hospital*	Minneapolis	J. A. Williams	13,788	.....	.....	155	..	.....	3P	.....
University of Minnesota Hospitals*[1]	Minneapolis	E. T. Bell	9,493	4,764	4,650	284	6	.....	4P	.....
Mayo Foundation	Rochester, Minn.	.....	.....	.....	.....	.....	18	.....	3	92.50
Ancker Hospital*	St. Paul	J. F. Noble	7,329	1,106	859	413	2	7/1	1	91.50
Charles T. Miller Hospital*[18]	St. Paul	K. Ikeda	8,733	4,264	3,981	132	1	.....	3	.....
St. Louis County Hospital*	Clayton, Mo.	W. G. Brown	3,279	1,179	938	170	1	.....	3	.....
Kansas City General Hospital No. 1*	Kansas City, Mo.	V. Buhler	11,074	2,491	2,091	414	4	7	3P	50.00
Menorah Hospital*[1]	Kansas City, Mo.	R. Koritschoner	6,869	4,053	2,326	60	..	.....	1P	200.00
Research Hospital*[1]	Kansas City, Mo.	H. K. B. Allebach	8,029	3,891	3,733	150	1	7/1	3	100.00
St. Joseph Hospital*	Kansas City, Mo.	R. W. Kerr	12,484	6,314	3,770	179	1	.....	3	.....
St. Luke's Hospital*[1]	Kansas City, Mo.	F. C. Helwig	11,232	7,067	5,535	146	10	.....	4P	.....
Barnes Hospital*[1]	St. Louis	R. A. Moore	16,062	6,044	6,044	306	3	7/1	3	25.00

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Numerical and other references will be found on page 225.

17. PATHOLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated [6]	Surgical Specimens	Number Examined Microscopically	Autopsies	Asst. Res. and Residencies Offered [6]	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
Homer G. Phillips Hospital[a1]	St. Louis	S. H. Gray	15,715	1,841	1,600	183	1	.....	1	$ 95.00
Jewish Hospital[a1]	St. Louis	Gray	8,488	.....	.....	141	1	.....	1	50.00
Missouri Baptist Hospital[a]	St. Louis	W. E. B. Hall	11,114	5,381	2,303	95	1	7/1	3P	70.00
St. Louis City Hospital[a1]	St. Louis	J. A. Saxton	17,714	3,329	3,329	513	4	7/1	3	95.00
St. Mary's Group of Hospitals[a]	St. Louis	H. Pinkerton	10,478	9,833	8,199	123	2	7/1	3	35.00
Montana Deaconess Hospital	Great Falls, Mont	E. Hildebrand	5,261	.....	.....	85	..	.....	1P	.....
Lincoln General Hospital[a1,17]	Lincoln, Neb	F. H. Tanner	6,312	2,624	.....	73	1	.....	1	.....
Creighton Memorial St. Joseph's Hospital[a1]	Omaha	C. H. Russum	12,529	19,905	17,300	125	1	7/1	3	100.00
Nebraska Methodist Hospital[a1]	Omaha	J. Schenken	7,406	2,93	2,963	97	2	.....	4P	100.00
University of Nebraska Hospital[a1]	Omaha	J. P. Tollman	3,094	1,464	1,464	136	2	.....	3	.....
Mary Hitchcock Memorial Hospital[a1]	Hanover, N. H	R. E. Miller	5,574	2,606	2,300	121	2	7/1	3	150.00
Elliot Hospital[1]	Manchester, N. H	S. M. Brooks	3,604	2,122	1,421	53	1	.....	1a	.....
Atlantic City Hospital[a]	Atlantic City, N. J	F. W. Konzelmann	8,314	2,314	2,314	122	1	7/1	1	50.00
Cooper Hospital[a]	Camden, N. J	W. T. Read, Jr	10,386	2,120	2,034	261	1	4/1	3	125.00
West Jersey Hospital[a]	Camden, N. J	W. R. Platt	9,93	.....	.....	186	1	9/1	2	125.00
Jersey City Hospital[a1]	Jersey City, N. J	A. Gnassi	23,819	5,578	5,578	438	2	.....	1	.....
Monmouth Memorial Hospital[a1]	Long Branch, N. J	J. A. Ferguson	7,348	1,336	1,336	151	1	7/1	3P	.....
Mountainside Hospital[a1]	Montclair, N. J	J. L. Work	7,628	2,759	2,917	117	1	7/1	3P	100.00
Burlington County Hospital	Mount Holly, N. J	J. T. Bauer	3,066	636	636	91	1	7/1	1a	100.00
Hospital of St. Barnabas and for Women and Children[a]	Newark, N. J	W. G. Bernhard	7,484	.....	.....	77	1	.....	2P	.....
Newark Beth Israel Hospital[a]	Newark, N. J	W. Antopol	11,762	4,314	4,314	137	2	7/1	3	25.00
Newark City Hospital[a1]	Newark, N. J	H. S. Martland	12,076	.....	.....	318	1	.....	3P	.....
Passaic General Hospital[a1]	Passaic, N. J	J. Gannon	6,732	.....	.....	113	..	.....	1P	.....
Paterson General Hospital[a]	Paterson, N. J	A. H. Davis	9,611	.....	.....	127	1	.....	2P	.....
Muhlenberg Hospital[a]	Plainfield, N. J	C. G. Darlington	8,832	.....	.....	97	..	.....	1P	.....
Mercer Hospital[a]	Trenton, N. J	T. K. Butterwell	7,373	1,336	1,366	90	1	7/1	2P	150.00
Albany Hospital[a1]	Albany, N. Y	A. W. Wright	15,009	6,610	6,610	359	4	7/1	3	41.67
Bender Hygienic Laboratory [1]	Albany, N. Y	J. J. Clemmer	.....	10,606	10,636	309	5	7/1	3	150.00
Binghamton City Hospital[a]	Binghamton, N. Y	V. Bergstrom	11,177	2,433	2,433	205	2	.....	3	.....
Beth-El Hospital[a1]	Brooklyn	N. Mitchell	8,270	2,580	2,548	120	..	.....	3P	.....
Brooklyn Hospital[a1]	Brooklyn	J. A. deVeer	9,181	2,852	.....	140	2	7/1	3	25.00
Coney Island Hospital[a1]	Brooklyn	H. Fink	6,105	1,400	1,400	136	2	7/1	3P	130.00
Cumberland Hospital[a1]	Brooklyn	S. H. Polayes	6,842	1,254	2,508	161	1	.....	3	.....
Greenpoint Hospital[a]	Brooklyn	R. Aronoff	6,210	9,706	9,664	101	1	7	4P	130.00
Jewish Hospital[a1]	Brooklyn	D. M. Grayzel	.....	6,027	4,990	.....	5	7	3	30.00
Kings County Hospital[a1]	Brooklyn	C. G. Burn	2,559	9,518	9,518	919	7	7/1	3	80.00
Long Island College Hospital[a1]	Brooklyn	W. H. Cook	9,748	2,928	2,928	101	3	7/1	3	25.00
Maimonides Hospital, Israel Zion Division[a1]	Brooklyn	A. Kantowitz	11,216	2,475	2,475	98	2	7/1	3	.....
Methodist Hospital[a]	Brooklyn	J. S. Howe	9,839	2,893	2,893	111	1	7/1	1	.....
St. John's Hospital[a1]	Brooklyn	R. Gettinger	6,095	1,457	1,457	60	1	.....	3	.....
Buffalo General Hospital[a]	Buffalo	K. L. Terplan	11,221	4,937	4,927	209	5	7/1	3	25.00
Edward J. Meyer Memorial Hospital[a1]	Buffalo	S. Sanes	10,777	.....	.....	491	4	.....	3	100.00
Millard Fillmore Hospital[a]	Buffalo	A. V. Postoloff	13,489	5,530	5,530	153	2	7/1	3	50.00
Flushing Hospital and Dispensary[a1]	Flushing, N. Y	J. Werne	9,556	1,951	1,823	103	1	7/1	1P	150.00
Meadowbrook Hospital[a]	Hempstead, N. Y	J. Curphey	8,263	3,469	1,590	274	2	7	1	115.00
Mary Immaculate Hospital[a]	Jamaica, N. Y	M. Bevilacqua	9,051	.....	.....	.....	.....	.....	2P	.....
Queens General Hospital[a1]	Jamaica, N. Y	A. Angrist	14,557	82,601	82,601	678	7	7/1	3	80.00
Charles S. Wilson Memorial Hospital[a1]	Johnson City, N. Y	A. Kostnski	9,241	3,055	3,055	115	1	7/1	3P	.....
St. John's Long Island City Hospital[a1]	Long Island City, N. Y	J. Werne	5,997	1,024	1,024	171	2	7/1	3a	100.00
Mount Vernon Hospital[a]	Mount Vernon, N. Y	G. Sharnoff	9,965	3,265	3,259	113	1	.....	1	.....
Bellevue Hospital[a1]	New York City	W. C. Von Glahn	58,182	4,794	4,794	856	5	.....	4P	60.00
Beth Israel Hospital[a1]	New York City	A. Plaut	9,174	3,188	3,188	108	2	1/1, 7/1	3	50.00
Bronx Hospital[a1]	New York City	J. Felsen	9,125	3,318	3,859	72	2	7/1	3	75.00
Doctors Hospital	New York City	R. Lisa	6,743	3,088	3,088	98	1	.....	1P	200.00
Flower and Fifth Avenue Hospitals[a1]	New York City	G. K. Higgins and F. D. Speer	9,525	4,911	4,866	94	4	7/1	3	.....
Fordham Hospital[a1]	New York City	L. Millman	10,488	2,250	2,106	325	3	7/1	1	43.32
Goldwater Memorial Hospital[a1]	New York City	J. Rosenthal	1,571	5,457	5,457	180	4	7/1	3	70.00
Harlem Hospital[a]	New York City	J. Weinbaum	21,267	7,747	7,747	333	3	1, 7	1	80.00
Hospital for Joint Diseases[a1]	New York City	H. L. Jaffe	5,021	2,592	2,592	48	.....	.....	1P	.....
Jewish Memorial Hospital[a]	New York City	A. Angrist	5,810	2,008	1,723	84	1	7/1	1	100.00
Lebanon Hospital[a1]	New York City	J. C. Ehrlich	6,246	.....	.....	87	..	.....	2P	.....
Lenox Hill Hospital[a1]	New York City	G. L. Rodenburg	12,975	4,011	4,011	117	3	1/1, 7/1	3	50.00
Lincoln Hospital[a1]	New York City	R. Brown	14,007	2,068	2,068	240	3	.....	3	.....
Memorial Hospital	New York City	F. W. Stewart	6,583	18,416	18,416	145	5	.....	3a	.....
Metropolitan Hospital[a1]	New York City	A. Saccone	12,512	1,466	1,434	235	1	.....	1	.....
Montefiore Hospital for Chronic Diseases[a1]	New York City	H. M. Zimmerman	4,027	2,684	2,684	405	3	7/1	3	50.00
Morrisania City Hospital[a1]	New York City	W. J. Ironson	12,343	3,290	3,290	214	2	7/1	1	80.00
Mount Sinai Hospital[a1]	New York City	S. Klemperer	15,986	.....	.....	293	13	.....	3	50.00
New York City Hospital[a1]	New York City	J. R. Lisa	12,040	1,870	1,620	263	4	7/1	3	80.00
New York Hospital[a]	New York City	J. G. Kidd	20,743	590	501	384	3	.....	2	.....
Presbyterian Hospital[a1]	New York City	H. P. Smith	30,220	5,866	5,484	338	3	.....	3	.....
Roosevelt Hospital[a1]	New York City	C. Brandes	10,932	3,216	3,216	152	1	7/1	1	100.33
St. Clare's Hospital[a1]	New York City	J. M. Ravid	9,513	2,246	2,246	129	1	7/1	2P	25.00
St. Luke's Hospital[a]	New York City	B. E. Clarke	9,829	2,743	2,743	176	2	7	3	50.00
St. Vincent's Hospital[a1]	New York City	A. Rottino	11,887	2,677	2,677	253	2	7/1	1	50.00
Sydenham Hospital[a1]	New York City	A. Ginzler	5,014	1,486	1,486	61	1	7	1	85.00
University Hospital[a1]	New York City	M. N. Richter	9,459	6,652	6,382	139	2	.....	3	.....
Willard Parker Hospital[1]	New York City	V. B. Dolgopol	5,469	304	304	33	1	7/1	1	130.00
Rochester General Hospital[a1]	Rochester, N. Y	M. G. Bohrod	14,953	5,208	5,208	267	1	7/1	3	.....
St. Mary's Hospital[a1]	Rochester, N. Y	J. Adler	12,322	8,852	2,743	161	2	7/1	1	125.00
Strong Memorial—Rochester Municipal Hospitals[a1]	Rochester, N. Y	G. H. Whipple	17,524	4,294	4,294	446	1	7/1	3a	45.00
Ellis Hospital[a1]	Schenectady, N. Y	E. Kellert	13,684	3,826	3,826	184	2	.....	3	.....
Syracuse University Medical Center	Syracuse, N. Y	.....	.....	.....	.....	.....	1	.....	3	.....
Samaritan Hospital[a]	Troy, N. Y	W. A. Derrick	5,323	2,178	2,178	81	1	7/1	1	125.00
Grasslands Hospital[a1]	Valhalla, N. Y	S. Gross	1,404	1,054	1,404	260	2	7	3	125.00
White Plains Hospital[a1]	White Plains, N. Y	H. D. Kesten	6,188	3,861	3,861	90	1	7/1	1	100.00
Charlotte Memorial Hospital[a]	Charlotte, N. C	P. Kimmelstiel	10,297	5,650	5,450	140	3	7/1	3	75.00
Duke Hospital[a1]	Durham, N. C	W. D. Forbus	13,862	10,946	10,940	204	5	7/1	3	83.33
Watts Hospital[a]	Durham, N. C	J. U. Gunter	8,668	3,168	2,782	127	1	7/1	2	.....
North Carolina Baptist Hospital[a1]	Winston-Salem, N. C	R. P. Morehead	7,762	3,163	3,163	144	3	4/1	3	.....
City Hospital[a]	Akron, Ohio	L. Catron	16,047	5,017	5,017	250	3	7/1	3	100.00
Aultman Hospital[a]	Canton, Ohio	D. G. Henderson	10,067	13,612	12,304	164	2	7/1	1	75.00
Bethesda Hospital[a1]	Cincinnati	R. J. Davis	8,407	3,448	2,220	158	1	7/1	2	150.00
Christ Hospital[a]	Cincinnati	J. W. Leichliter	11,027	5,727	3,210	165	1	7/1	1	75.00
Cincinnati General Hospital[a1]	Cincinnati	E. Gall	14,953	2,957	2,892	500	5	7/1	3a	.....

Numerical and other references will be found on page 225.

17. PATHOLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated [6]	Surgical Specimens	Number Examined Microscopically	Autopsies	Asst. Res. and Residencies Offered [6]	Beginning of Year (1949) Length of Approved Program (Years)	Beginning Stipend (Month)
Good Samaritan Hospital*	Cincinnati	W. McK. Germain	16,431	8,618	14,778	132	1	3	$ 75.00
Jewish Hospital*	Cincinnati	P. Wasserman	9,432	3,924	4,095	179	1	7/1 2	75.00
City Hospital [1]	Cleveland	T. Kinney	12,863	2,472	2,472	1,056	6	 3	.....
Cleveland Clinic Hospital [1]	Cleveland	J. B. Hazard	8,473	4,564	4,564	105	8	7/1 4P	100.00
Mount Sinai Hospital* [1]	Cleveland	B. S. Kline	9,644	3,375	3,375	106	2	7/1 3	65.00
St. Luke's Hospital*	Cleveland	R. Dominguez	14,044	3,926	3,518	149	2	6/25 3	60.00
St. Vincent Charity Hospital*	Cleveland	D. J. Renbock	8,781	2,123	2,102	122	1	7/1 1	75.00
University Hospitals* [1]	Cleveland	H. T. Karsner	22,725	5,425	5,425	548	6	7/1 3	35.00
Grant Hospital* [1]	Columbus, Ohio	W. H. Benham	9,998	2,939	2,533	123	1	7/1 1	100.00
Ohio State University Hospital* [1]	Columbus, Ohio	H. L. Rennart	8,876	3,066	3,066	471	4	7/1 3	50.00
White Cross Hospital* [1]	Columbus, Ohio	R. S. Fidler	10,718	11,309	10,146	136	2	7 3	100.00
Miami Valley Hospital*	Dayton, Ohio	M. Oosting	13,752	7,687	7,687	220	1	7/1 1	75.00
Huron Road Hospital* [1]	E. Cleveland, Ohio	E. Goodsitt	10,717	4,948	3,997	133	1	..... 4P	50.00
Mercy Hospital* [1]	Hamilton, Ohio	K. Lande	8,639	.....	.....	100	..	..... 1P	.....
Mercy Hospital*	Toledo, Ohio	E. L. Burns	11,750	5,512	4,396	185	1	 3	.....
St. Vincent's Hospital* [1]	Toledo, Ohio	M. F. Vidoli	10,656	3,089	5,617	129	..	7 1	100.00
Toledo Hospital*	Toledo, Ohio	B. Steinberg	9,574	3,473	2,827	172	2	..... 4*	.....
Youngstown Hospital*	Youngstown, Ohio	H. K. Gifford	19,327	4,375	4,375	245	3	7/1 4P	100.00
University Hospitals*	Oklahoma, City	B. Halpert	6,474	2,279	2,054	136	3	7/1 3	35.00
Hillcrest Memorial Hospital* [1]	Tulsa, Okla	L. Lowbeer	10,786	.....	.....	102	..	..... 1a	.....
Emanuel Hospital* [1]	Portland, Ore	H. H. Foskett	13,183	7,294	7,824	141	1	7/1 1	75.00
Good Samaritan Hospital*	Portland, Ore	W. L. Lehman	13,927	3,937	3,329	174	1	 3	.....
Providence Hospital*	Portland, Ore	J. Minckler	7,800	2,544	1,858	138	..	7/1 2a	75.00
St. Vincent's Hospital*	Portland, Ore	F. R. Menne	10,845	6,317	6,300	125	1	..... 4P	.....
University of Oregon Medical School Hospitals and Clinics* [1]	Portland, Ore	W. C. Hunter	6,879	2,666	2,666	383	4	7/1 3	75.00
Abington Memorial Hospital*	Abington, Pa	J. Elman	8,025	4,108	3,106	266	2	7/1 4P	100.00
Allentown Hospital*	Allentown, Pa	J. J. Wenner	13,658	4,630	2,945	169	1	7/1 3	100.00
Sacred Heart Hospital*	Allentown, Pa	D. E. Stader	7,695	4,362	3,745	136	1	7/1 1P	150.00
St. Luke's Hospital* [1]	Bethlehem, Pa	T. A. Cope, Jr.	14,210	1,842	1,842	160	1	7/1 3P	100.00
Bryn Mawr Hospital*	Bryn Mawr, Pa	M. M. Strumia	7,564	3,057	3,057	136	2	 1	.....
George F. Geisinger Memorial Hospital*	Danville, Pa	R. P. Hunt	8,358	2,074	2,035	100	1	 1	75.00
Fitzgerald-Mercy Hospital*	Darby, Pa	A. Valdes-Dapena	6,780	.....	.....	67	1	7/1 1	200.00
Hamot Hospital* [1]	Erie, Pa	E. L. Armstrong	9,491	1,696	1,696	161	4	1/1 4P	.....
Episcopal Hospital* [1]	Philadelphia	W. P. Belk	12,347	1,449	8,393	106	1	7/1 1	50.00
Frankford Hospital*	Philadelphia	W. L. C. Spaeth	4,484	1,508	1,508	81	1	7/1 1a	100.00
Germantown Dispensary and Hospital*	Philadelphia	F. B. Lynch, Jr.	7,986	1,450	1,100	134	1	7 1	50.00
Graduate Hospital of the University of Pennsylvania*	Philadelphia	E. A. Case	7,580	2,592	2,592	135	3	7/1 3	.....
Hahnemann Hospital* [1]	Philadelphia	J. E. Gregory	14,184	3,781	3,781	297	3	..... 4P	25.00
Hospital of the University of Pennsylvania* [1]	Philadelphia	B. Lucke	18,395	6,296	6,296	361	5	Varies 3	.....
Jefferson Medical College Hospital*	Philadelphia	C. J. Bucher	17,277	250,124	250,124	278	5	7/1 3	.....
Jewish Hospital* [1]	Philadelphia	H. Ingleby	9,224	2,665	2,355	252	3	7 1	50.00
Lankenau Hospital*	Philadelphia	C. E. Brown	6,052	106,583	.....	141	2	7/1 3	50.00
Mount Sinai Hospital* [1]	Philadelphia	D. R. Meranze	6,231	2,486	2,486	178	3	6/21 4P	50.00
Pennsylvania Hospital*	Philadelphia	A. R. Crane	10,439	3,061	3,061	195	3	11/1, 7/1 3	20.00
Philadelphia General Hospital* [1]	Philadelphia	J. H. Clark	25,436	4,094	4,094	1,815	5	7/1 3	70.00
Presbyterian Hospital*	Philadelphia	R. P. Custer	7,174	2,351	2,351	156	3	..... 4P	25.00
Temple University Hospital* [1]	Philadelphia	E. E. Aegerter	14,563	6,208	6,208	263	3	7/1 3	.....
Allegheny General Hospital*	Pittsburgh	S. R. Haythorn	11,946	2,714	2,714	139	1	 3	100.00
Children's Hospital [1]	Pittsburgh	J. L. Benton	5,745	363	363	88	1	7 1	100.00
Mercy Hospital* [1]	Pittsburgh	H. H. Permar	14,945	4,134	3,927	183	1	9/1 3	100.00
Montefiore Hospital*	Pittsburgh	K. Yardumian	8,986	2,887	4,817	128	1	7/1 1	50.00
Presbyterian Hospital* [1]	Pittsburgh	G. R. Lacy	5,027	4,329	4,329	126	2	 3	41.67
St. Francis Hospital* [1]	Pittsburgh	R. C. Hamilton	14,674	148,427	2,104	85	1	7/1 3	100.00
Western Pennsylvania Hospital*	Pittsburgh	A. Graham	13,535	3,302	3,302	120	1	10/1 3P	75.00
Reading Hospital* [1]	Reading, Pa	W. P. Jennings	9,214	2,773	2,320	201	1	7/1 3	100.00
Robert Packer Hospital*	Sayre, Pa	C. H. DeWan	10,558	1,927	1,871	142	2	7/1 2	150.00
Scranton State Hospital* [1]	Scranton, Pa	E. P. Swartz	5,876	2,148	1,512	82	..	..... 1P	.....
Williamsport Hospital*	Williamsport, Pa	M. C. Colvin	8,773	3,077	2,029	124	1	 3	.....
York Hospital*	York, Pa	L. C. Pusch	7,544	1,893	1,554	122	..	 3	.....
Rhode Island Hospital* [1]	Providence, R. I		14,398	5,118	5,118	324	6	7/1 3P	50.00
Medical College of the State of South Carolina	Charleston, S. C		.....	.....	.....	1	.....	3	.....
Baroness Erlanger Hospital* [1]	Chattanooga, Tenn	J. Adams	15,565	4,256	5,762	142	..	..... 4P	.....
Baptist Memorial Hospital*	Memphis, Tenn	M. Strumbull	8,934	7,282	6,754	112	2	7/1 2	75.00
John Gaston Hospital*	Memphis, Tenn	D. Sprunt	16,649	2,878	5,127	612	11	 3	.....
Methodist Hospital* [1]	Memphis, Tenn	W. W. Tribby	15,465	9,720	5,270	104	2	7/1 4P	75.00
St. Joseph Hospital* [1]	Memphis, Tenn	T. C. Moss	10,818	11,029	4,780	184	3	..... 3a	.....
Nashville General Hospital*	Nashville, Tenn	W. A. Demonbreun	6,525	.....	.....	113	2	 1	.....
Vanderbilt University Hospital* [1]	Nashville, Tenn	K. M. Goepfarture	9,234	1,804	1,749	217	1	7/1 3	33.41
Baylor University Hospital* [1]	Dallas, Texas	J. M. Hill	16,594	6,812	6,812	156	4	7/1 3	50.00
Parkland Hospital* [1]	Dallas, Texas	E. E. Muirhead	9,982	2,879	6,346	224	2	7/1 3	50.00
St. Paul's Hospital*	Dallas, Texas	J. L. Goforth	12,870	4,694	3,948	101	3	..... 4P	.....
University of Texas Medical Branch Hospitals* [1]	Galveston, Texas	R. Brindley	11,132	25,639	24,052	293	5	7 3	100.00
Hermann Hospital*	Houston, Texas	V. H. Keller	9,054	3,343	3,148	146	1	 3	50.00
Jefferson Davis Hospital* [1]	Houston, Texas	W. W. Coulter	12,707	3,159	8,292	270	1	 3	.....
Baptist Memorial Hospital*	San Antonio, Texas	A. O. Severance	12,393	.....	.....	115	..	..... 2P	.....
Santa Rosa Hospital*	San Antonio, Texas	J. M. Moore	13,094	4,876	3,848	170	2	7/1 3	110.00
Dr. W. H. Groves Latter-Day Saints Hospital* [1]	Salt Lake City	J. H. Carliquist	14,481	5,788	5,788	159	..	..... 1a	.....
Holy Cross Hospital* [1]	Salt Lake City	O. McNeil	7,387	4,739	4,739	60	1	7/1 1P	50.00
Salt Lake County General Hospital* [1]	Salt Lake City	F. D. Gunn	3,672	1,361	1,222	174	3	7/1 3	50.00
Mary Fletcher Hospital* [1]	Burlington, Vt	B. Pearson	7,246	1,281	1,281	94	8	7/1 3	50.00
University of Virginia Hospital* [1]	Charlottesville, Va	J. R. Cash	14,271	12,395	12,395	171	1	..... 3a	.....
DePaul Hospital* [1]	Norfolk, Va	A. Strauss	8,872	3,090	3,028	117	1	7/1 3	100.00
Norfolk General Hospital*	Norfolk, Va	L. J. Motyca and E. D. Levy	9,766	4,862	4,862	110	1	7/1 3	100.00
Medical College of Virginia Hospital Division* [1]	Richmond, Va	F. L. Apperly	16,859	8,637	8,637	276	3	7/1 3	46.50
King County Hospital* [1] Unit no. 1 (Harborview)	Seattle, Wash	C. R. Jensen	12,153	2,549	1,757	465	1	 3	.....
Providence Hospital* [1]	Seattle	D. G. Mason	11,916	4,821	3,341	168	1	7/1 3	100.00
Swedish Hospital*	Seattle	P. K. Lund	11,808	13,886	9,431	157	1	7/1 1	100.00
Deaconess Hospital* [1]	Spokane, Wash	G. A. C. Snyder	8,874	4,296	3,002	145	1	7/1 3	150.00
St. Luke's Hospital* [1]	Spokane, Wash	O. O. Christianson	7,264	2,740	1,405	108	1	..... 2P	.....
St. Joseph's Hospital*	Tacoma, Wash	C. R. McColl	8,779	3,922	3,922	125	1	7/1 1	.....
Tacoma General Hospital* [1]	Tacoma, Wash	C. P. Larson	8,375	2,361	2,059	95	2	7/1 3	150.00
Charleston General Hospital* [1]	Charleston, W. Va	W. Putschar	8,782	2,113	2,084	74	2	7/1 3	100.00
State of Wisconsin General Hospital* [1]	Madison, Wis	D. M. Angevine and W. D. Stovall	14,349	3,410	3,386	255	5	7 3	25.00
Columbia Hospital* [33]	Milwaukee	G. Ritchie	5,294	2,004	1,302	96	1	 3	.....

Numerical and other references will be found on page 225.

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17. PATHOLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated [6]	Surgical Specimens	Number Examined Microscopically	Autopsies	Asst. Res. and Residencies Offered [8]	Beginning of Service (1940)	Length of Approved Program (Years)	Beginning Stipend (Month)
Milwaukee County Hospital[a1]	Milwaukee	J. F. Kuzma	18,486	747	747	485	3	Varies	4[p]	$158.02
St. Joseph's Hospital[a]	Milwaukee	W. A. D. Anderson	13,051	3,447	2,262	127	2	7	4[p]	75.00
St. Mary's Hospital[a]	Milwaukee	S. B. Pessin	9,321	3,689	2,096	155	1	7/1	1[a]	.....
Queen's Hospital[a1]	Honolulu, Hawaii	S. Price	12,360	3,253	3,253	225	2	7	3	75.00
University Hospital (School of Tropical Medicine)	San Juan, P. R.	E. Kopisch	846	.....	.....	13	..	.....	3[a]	.....

18. PEDIATRICS

The following services are approved by the Council and the American Board of Pediatrics Hospitals, 211; Assistant Residencies and Residencies, 959

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [8]	Beginning of Service (1940)	Length of Approved Program (years)	Beginning Stipend (Month)
United States Army										
Letterman General Hospital[a]	San Francisco	W. M. Edwards	311	414	9	9	..	.....	1	n
†Brooke General Hospital[a]	Denver, Colo.		.....	.....	..	..	..	.....	2	n
Fitzsimons General Hospital[a]	San Antonio, Texas	L. J. Geppert	1,679	12,985	33	30	4	.....	2	n
United States Navy										
†U. S. Naval Hospital[a]	San Diego, Calif.		.....	.....	..	..	..	.....	1	n
†U. S. Naval Hospital[a]	Chelsea, Mass.	D. W. Sherwood	.....	.....	..	..	2	.....	1	n
U. S. Naval Hospital[a]	Philadelphia	J. F. Shaul	431	7,209	..	1	4	.....	1	n
Federal Security Agency										
Freedmen's Hospital[a1]	Washington, D. C.	R. Scott	445	2,325	28	18	4	7/1	2	n
Nonfederal										
Carraway Methodist Hospital[a]	Birmingham, Ala.	S. Wainwright and G. Griffin	928	11,509	21	10	1	7/1	1	$100.00
Children's Hospital [1]	Birmingham, Ala.	A. A. Walker	1,897	7,517	40	19	2	5/1	2	100.00
Jefferson-Hillman Hospitals[a1]	Birmingham, Ala.	A. A. Walker	1,885	5,421	98	54	4	.....	2	.....
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company[a]	Fairfield, Ala.	G. C. McCullough	970	11,404	19	11	3	7/1	1	225.00
†University Hospital[a1]	Little Rock, Ark.	W. A. Reilly	1,789	2,130	84	30	4	7/1	2	50.00
San Joaquin General Hospital[a1]	French Camp, Calif.		.....	.....	..	..	..	.....	1	.....
General Hospital of Fresno County[a1]	Fresno, Calif.	M. Eakin	1,022	1,986	73	35	1	7/1	1	231.00
California Babies' and Children's Hospital [1]	Los Angeles	J. W. St. Geme	407	19,803	3	3	1	7/1	1	100.00
Childrens Hospital[a1]	Los Angeles	E. S. Fish	2,701	58,601	14	105	10	.....	2	138.00
Los Angeles County Hospital[a1]	Los Angeles	M. B. Brooks	3,802	7,096	161	111	11	Varies	2	165.00
Queen of Angels Hospital[a]	Los Angeles		1,475	938	..	68	1	7/1	1	100.00
White Memorial Hospital[a1]	Los Angeles	M. B. Brooks	519	9,316	20	10	3	7/1	2	147.33
Children's Hospital of the East Bay [1]	Oakland, Calif.	C. D. Sweet	4,220	22,782	70	46	7	1, 7	2	150.00
Children's Hospital[a1]	San Francisco	C. F. Gelston	666	3,534	21	19	2	7/1	2	50.00
Mt. Zion Hospital[a]	San Francisco	F. Wolff	403	1,045	19	14	..	.....	1	50.00
St. Mary's Hospital[a]	San Francisco	R. Flood	.....	.....	..	..	1	7/1	1	160.00
San Francisco Hospital[a1]	San Francisco		2,148	.....	97	48	2	.....	2	175.00
Stanford University Hospitals[a1]	San Francisco	H. K. Faber	530	16,893	22	18	4	7/1	2	50.00
University of California Hospital[a1]	San Francisco	W. O. Deamer	639	13,573	67	51	4	7/1, 8/1, 9/1	2	50.00
Children's Hospital [1]	Denver	J. M. Nelson	3,458	5,304	94	86	8	7	2	50.00
University of Colorado Medical Center										
Colorado General Hospital[a1]	Denver	H. H. Gordon	383	8,417	22	20	15	7/1	2	75.00
Denver General Hospital[a1,28]	Denver	H. H. Gordon	1,408	5,675	31	24	3	7	1	40.00
†Hartford Hospital[a]	Hartford, Conn.	E. Caulfield	1,024	111	17	14	2	7/1	1	50.00
Grace-New Haven Community Hospital										
New Haven Unit (University Service)[a1]	New Haven, Conn.	G. Powers	2,864	10,033	60	50	10	7/1	2	40.00
Hospital of St. Raphael[a]	New Haven, Conn.	W. C. McGuire	.....	.....	..	..	1	7/1	1	75.00
†Delaware Hospital[a1]	Wilmington, Del.	C. E. Wagner	1,550	750	48	33	1	7/1	1	110.00
Children's Hospital [1]	Washington, D. C.	J. S. Wall	.....	.....	..	..	6	.....	2	.....
Gallinger Municipal Hospital[a1]	Washington, D. C.		1,357	11,278	40	14	8	7/1	2	100.00
†Providence Hospital[a]	Washington, D. C.	W. F. O'Donnell	4,483	860	64	59	1	7/1	1	75.00
†Crawford W. Long Memorial Hospital[a]	Atlanta, Ga.	L. H. Muse	6,493	878	91	47	4	7/1	..	75.00
Grady Memorial Hospital[a]	Atlanta, Ga.	R. W. Dickson	1,059	32,060	83	36	9	7/1	2	.....
Henrietta Egleston Hospital for Children [1]	Atlanta, Ga.	M. H. Roberts	.....	.....	..	..	3	1/1, 7/1	2	55.00
University Hospital[a1]	Augusta, Ga.	P. Mulherin	1,287	.....	72	16	2	7	..	40.00
Children's Memorial Hospital [1]	Chicago	S. Gibson	2,259	50,031	86	76	17	1, 7	2	75.00
Cook County Hospital[a1]	Chicago	A. Levinson	8,397	35,613	333	..	14	1, 7	2	32.00
Mercy Hospital—Loyola University Clinics[a1]	Chicago	H. W. Elghammer	1,088	2,161	22	13	2	.....	1	25.00
Michael Reese Hospital[a1]	Chicago	A. Abt	3,335	11,211	..	..	6	1/1, 7/1	2	25.00
†Mount Sinai Hospital[a1]	Chicago	M. P. Borovsky	956	1,801	6	6	1	7/1	1	50.00
Presbyterian Hospital[a1]	Chicago	H. N. Sanford	1,487	4,036	47	42	3	.....	2	25.00
Provident Hospital[a1]	Chicago		.....	.....	..	..	1	.....	2	.....
Research and Educational Hospitals[a1]	Chicago	H. G. Poncher	321	9,438	..	..	4	7/1	2	55.00
St. Joseph Hospital[a]	Chicago	A. L. Hoyne	961	1,217	16	14	1	9/1	1	75.00
St. Luke's Hospital[a1]	Chicago	A. D. Biggs	1,322	7,164	22	21	2	7/1	2	25.00
St. Vincent's Infant and Maternity Hospital [1]	Chicago	L. W. Sauer	559	0	3	3	3	1, 7	1	50.00
University of Chicago Clinics[a1]	Chicago	F. H. Wright	1,069	18,591	38	32	8	.....	2	25.00
Little Company of Mary Hospital[a]	Evergreen Park, Ill.	E. G. Lawler	1,975	.....	12	3	1	7/1	1	100.00
St. Francis Hospital[a1]	Peoria, Ill.	F. H. Maurer	1,308	651	70	29	1	1	1	150.00
Indianapolis General Hospital[a1]	Indianapolis	B. K. Rust	1,916	5,634	113	47	2	7/1	2	80.00
Indiana University Medical Center[a1]	Indianapolis	M. Winter	1,927	3,515	179	126	5	7/1	2	68.33
Iowa Methodist Hospital (Raymond Blank Memorial Hospital for Children)[a]	Des Moines, Iowa	L. F. Hill	3,839	.....	54	46	6	7/1	2	75.00
University Hospitals[a1]	Iowa City	P. C. Jeans	1,377	2,270	70	43	7	7/1	2	50.00
University of Kansas Medical Center[a1]	Kansas City, Kan.	H. C. Miller	923	5,676	57	42	5	7	2	.....
Louisville General Hospital[a1,49]	Louisville, Ky.	L. T. Davidson	2,023	11,237	77	23	9	7/1	2	45.00
St. Joseph Infirmary[a]	Louisville, Ky.	H. Andrews	1,958	641	41	24	3	7/1	2	75.00
Charity Hospital of Louisiana[a1]	New Orleans	R. V. Platou	3,102	25,392	119	68	17	7/1	2	25.00
Touro Infirmary[a]	New Orleans	J. Graubarth	722	8,553	20	20	2	.....	2	17.50

Numerical and other references will be found on page 225.

18. PEDIATRICS—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Length of Approved Program (Years)	Stipend Beginning (Month)
†Shreveport Charity Hospital*	Shreveport, La.	C. H. Webb	1,606	0	76	45	2	7/1	..	$ 60.00
†Central Maine General Hospital*	Lewiston, Maine	G. L. Brooks	850	788	29	26	2	7/1	1	.....
Baltimore City Hospitals*	Baltimore	H. E. Harrison	600	4,931	77	58	5	7/1	2	15.00
Johns Hopkins Hospital*	Baltimore	F. F. Schwentker	1,238	52,091	164	142	14	7/1	2	41.66
†Mercy Hospital*	Baltimore	E. Friedenwald	398	1,316	22	11	1	7/1	1	75.00
†Sinai Hospital*	Baltimore	A. J. Schaffer	554	.....	73	60	2	7/1	1	33.00
Union Memorial Hospital*	Baltimore	S. B. Grimes	477	1,709	12	6	2	.....	1	.....
University Hospital*	Baltimore	C. L. Joslin	636	8,526	44	29	5	7/1	2	75.00
Boston City Hospital*	Boston	M. J. English	4,174	8,983	232	58	1	.....	2	.....
Boston Floating Hospital 1	Boston	J. M. Batty	1,383	....	62	45	7	.....	2	.....
Children's Hospital*	Boston	C. Janeway	1,016	17,654	53	44	27	Varies	2	41.67
Massachusetts General Hospital*	Boston	A. M. Butler	670	....	27	24	7	.....	2	.....
New England Hospital for Women and Children*	Boston	E. Zaudy	553	1,708	3	3	3	1/1	2	50.00
University Hospital*	Ann Arbor, Mich	J. Wilson	1,306	12,392	82	62	11	7/1	2	111.80
Children's Hospital 1	Detroit	P. V. Wooley, Jr.	4,377	24,660	423	290	20	7/1	2	100.00
Harper Hospital*	Detroit	D. J. Barnes	1,564	353	29	15	2	.....	1	.....
Henry Ford Hospital*	Detroit	J. A. Johnston	1,768	22,938	22	14	5	7/1	2	200.00
Providence Hosp.tal*	Detroit	L. P. Sondn	789	....	45	30	1	7/1	1	140.00
†Butterworth Hospital*	Grand Rapids, Mich	L. J. Schermerhorn	828	614	45	34	2	7/1	2	100.00
†Saginaw General Hospital*	Saginaw, Mich	R. M. Kempton	3,000	601	57	32	1	1/1	1	100.00
St. Mary's Hospital*	Duluth, Minn	R. P. Buckley	2,3.6	....	44	39	3	.....	1	.....
Minneapolis General Hospital*	Minneapolis	A. V. Stoesser	2,463	4,040	39	26	3	1/1, 7/1	2	115.00
†Northwestern Hospital*	Minneapolis	E. Platou	2,182	.....	31	17	1	7/1	..	150.00
†St. Barnabas Hospital*	Minneapolis	.....	3,536	.....	40	36	1	.....	1	.....
University of Minnesota Hospitals*	Minneapolis	I. McQuarrie	1,569	.....	86	..	17	.....	2	.....
Mayo Foundation	Rochester, Minn	R. L. J. Kennedy	.....	.....	..	..	15	.....	2	92.50
Kansas City General Hospital No. 1*	Kansas City, Mo	H. M. Gilkey	1,500	4,319	21	11	2	7/1	1	50.00
Homer G. Phillips Hospital*	St. Louis	P. J. White	1,964	6,286	56	33	4	7/1	2	50.00
†Jewish Hospital*	St. Louis	.....	.....	.....	..	..	1	7	1	50.00
St. Louis Children's Hospital 1	St. Louis	A. F Hartmann	3,537	.....	139	101	24	7/1	2	10.00
St. Louis City Hospital*	St. Louis	A. Hartman and V. Hrdlicka	2,087	4,100	84	38	6	7/1	2	95.00
St. Mary's Group of Hospitals*	St. Louis	P. G. Danis	1,815	11,776	36	18	6	7/1	2	35.00
†Creighton Memorial St. Joseph Hospital*	Omaha	J. H. Murphy	1,677	.....	21	11	1	7/1	1	100.00
†University of Nebraska Hosp.tal*	Omaha	J. A. Henske	457	1,009	36	35	4	7/1	2	75.00
Mary Hitchcock Memorial Hospital*	Hanover, N. H	C. C. Stewart	738	4,420	13	11	1	7/1	1	150.00
Jersey City Hospitals*	Jersey City, N. J	G. P. De Fucelo	2,9.1	7,241	30	18	2	.....	2	.....
Babies Hospital, Colt Memorial 1	Newark, N. J	C. R. Brown	2,235	3,000	24	18	2	7/1	1	50.00
†St. Michael's Hospital*	Newark, N. J	H. A. Murray	2,229	4,622	23	18	4	7/1	2	75.00
Albany Hospital*	Albany, N. Y	O. A. Faust	909	2,361	47	33	4	7/1	2	41.67
†Beth-El Hospital*	Brooklyn	A. Litvak	3,922	1,588	78	61	3	1, 7	1	100.00
Brooklyn Hospital*	Brooklyn	H. A. Naumer	.....	6,132	..	..	2	7/1	1	25.00
Coney Island Hospital*	Brooklyn	S. Nussbaum	1,468	2,165	50	38	1	7/1	1	130.00
Cumberland Hospital*	Brooklyn	T. B. Givan	2,160	4,528	65	60	2	7/1	2	70.00
†Greenpoint Hospital*	Brooklyn	L. Schiff	652	4,578	28	19	2	7	1	80.00
Jewish Hospital*	Brooklyn	B. Kramer	5,317	13,738	94	57	9	7	2	50.00
Kings County Hospital*	Brooklyn	G. Brockway and Krahulik	9,044	5,699	261	165	4	7/1	2	80.00
Long Island College Hospital*	Brooklyn	C. A. Weymuller	584	6,959	22	16	4	7/1	2	25.00
Maimonides Hospital—Israel Zion Div.*	Brooklyn	J. Rosenblum and M. R. Palinsky	346	1,034	38	21	..	7/1	1	.....
Methodist Hospital*	Brooklyn	W. F. Watton	475	3,251	13	13	2	7/1	1	.....
Norwegian Lutheran Deaconesses' Home and Hospital*	Brooklyn	J. A. Monfort and T. B. Givan	789	1,599	12	..	2	7/1	..	25.00
†St. Mary's Hospital*	Brooklyn	K. G. Jennings	423	798	19	11	1	7/1	1	50.00
Children's Hospital 1	Buffalo	M. I. Rubin	1,804	.....	54	..	20	1, 7	2	25.00
Edward J. Meyer Memorial Hospital*	Buffalo	F. J. Gustina	.....	.....	..	..	4	7/1	1	100.00
Mary Imogene Bassett Hospital	Cooperstown, N. Y	T. C. Goodwin	280	5,310	16	15	1	7/1	2	83.33
Queens General Hospital*	Jamaica, N. Y	A. A. Releman	1,458	3,539	67	44	4	8/15, 7/1	2	80.00
Bellevue Hospital Div. III—N. Y. Univ.*	New York City	L. E. Holt, Jr.	1,471	27,325	91	64	5	1, 7	2	60.00
Beth Israel Hospital*	New York City	P. Cohen and J. M. Lewis	356	2,391	24	15	4	1/1, 7/1	1	50.00
Flower and Fifth Avenue Hospitals*	New York City	L. A. Slobody	904	4,066	58	34	3	7/1	2	.....
Fordham Hospital*	New York City	J. Golomb	720	1,836	44	21	2	7/1	2	80.00
†Gouverneur Hospital*	New York City	L. Hodes	408	5,063	7	2	1	7/1	1	80.00
Harlem Hospital*	New York City	M. Gliekh	1,335	8,166	90	33	4	1, 7	2	80.00
Lenox Hill Hospital*	New York City	H. Chaplin	627	.....	15	10	1	7/1	2	50.00
Lincoln Hospital*	New York City	H. S. Altman	1,054	6,593	43	26	5	.....	2	.....
Metropolitan Hospital*	New York City	A. Rose	1,652	7,301	94	18	2	7/1	2	130.00
Morrisania City Hospital*	New York City	L. H. Barenberg	933	2,717	37	21	3	7/1	2	80.00
Mount Sinai Hospital*	New York City	.....	.....	.....	..	..	5	.....	2	50.00
New York City Hospital*	New York City	G. R. Irving	1,576	5,501	73	56	3	7/1	2	80.00
New York Foundling Hospital 1	New York City	A. J. Vignec	595	5,430	4	4	3	1, 7	½	50.00
New York Hospital*	New York City	S. Z. Levine	2,485	34,563	138	114	8	7/1	2	85.00
†New York Infirmary*	New York City	R. Bakwin	395	3,745	5	1	7	.....	1	75.00
Presbyterian Hospital*	New York City	R. McIntosh	4,098	32,771	112	..	18	.....	2	41.66
Roosevelt Hospital*	New York City	A. T. Martin	555	2,182	10	6	1	7/1	1	108.33
St. Clare's Hospital*	New York City	C. H. O'Regan	2,192	5,767	7	6	3	7/1	1	25.00
St. Luke's Hospital*	New York City	H. F. Jackson	734	5,275	24	20	4	1, 7	2	50.00
St. Vincent's Hospital*	New York City	A. J. Vignec	1,003	6,906	18	11	2	7/1	2	50.00
†Sydenham Hospital*	New York City	E. Schiff and H. O. Pasachoff	244	1,192	6	3	1	7/1	1	35.00
University Hospitals*	New York City	A. G. DeSanctis	691	12,423	32	20	5	5/1, 7/1	2	90.00
Genesee Hospital*	Rochester, N. Y	.....	529	759	12	12	1	1	1	83.33
†Rochester General Hospital*	Rochester, N. Y	F. W. Bush	816	1,978	..	..	1	7/1	1	70.00
Strong Memorial-Rochester Municipal Hospitals*	Rochester, N. Y	S. W. Clausen	1,529	9,117	71	61	8	7/1	2	45.00
†St. Vincent's Hospital*	Staten Island, N. Y	G. McCormick	3,122	774	37	22	1	7/1	1	100.00
Sea View Hospital 1	Staten Island, N. Y	B. Ratner	402	.....	5	1	7	7/1	1	150.00
Syracuse Memorial Hospitals*	Syracuse, N. Y	T. C. Wyatt	904	406	67	52	4	7/1	2	125.00
Grasslands Hospital*	Valhalla, N. Y	F. D. Barnes	513	1,584	9	9	3	7	2	125.00
Charlotte Memorial Hospital*	Charlotte, N. C	C. H. Gay	1,707	3,843	53	26	2	7/1	1	60.00
†Presbyterian Hospital	Charlotte, N. C	J. R. Ashe	875	230	7	3	1	.....	1	.....
Duke Hospital*	Durham, N. C	W. O. Davison	2,200	9,000	105	59	16	7/1	2	83.33
Watts Hospital*	Durham, N. C	.....	920	2,278	20	9	1	7/1	2	75.00

Numerical and other references will be found on page 225.

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18. PEDIATRICS—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1940)	Length of Approved Program (Years)	Beginning Stipend (Month)
†Sternberger Hospital for Women and Children [1]	Greensboro, N. C.	M. Y. Keith	.....	.....	..	..	1	1/1	1	.....
†Rex Hospital[a1]	Raleigh, N. C.	A. S. Root	1,705	942	26	7	1	7/1	1	$155.00
Babies' Hospital [1]	Wilmington, N. C.	J. B. Sidbury	.....	.....	..	..	2	7/1	1	100.00
James Walker Memorial Hospital[a1]	Wilmington, N. C.	J. C. Knox	3,219	2,239	79	19	1	.....	1	.....
North Carolina Baptist Hospital[a1]	Winston-Salem, N. C.	L. J. Butler	712	2,191	24	13	4	7/1	2	.....
Trinity Hospital*	Minot, N. D.		328	6,744	..	..	1	.....	1	.....
Children's Hospital	Akron, Ohio	M. M. Miller	188	.....	3	1	4	7/1	2	100.00
Children's Hospital [1]	Cincinnati	A. A. Weech	.....	.....	..	..	16	7/1	2	35.00
Cincinnati General Hospital[a1]	Cincinnati	A. A. Weech	1,688	9,286	41	29	16	7/1	2	.....
University Hospitals[a1]	Cleveland	C. F. McKhann	2,285	16,884	133	..	9	7/1	2	25.00
Children's Hospital [1]	Columbus, Ohio	E. H. Baxter	1,899	11,188	172	116	11	.....	2	.....
University Hospitals*	Oklahoma City	C. H. Hall	803	6,287	62	41	4	7/1	2	35.00
Hillcrest Memorial Hospital[a1]	Tulsa, Okla.	H. Graham	1,589	.....	26	12	5	.....	2	.....
University of Oregon Medical School Hospitals and Clinics[a1]	Portland, Ore.	J. B. Bilderback	1,137	6,735	72	59	4	7/1	2	75.00
†Abington Memorial Hospital*	Abington, Pa.	T. S. Wilder	334	193	25	3	1	7/1	1	50.00
Children's Hospital [1]	Philadelphia	J. Stokes, Jr.	1,852	15,642	67	58	29	.....	2	.....
Children's Hospital of the Mary J. Drexel Home [1]	Philadelphia		.....	.....	..	..	2	7/1	1	50.00
†Germantown Dispensary and Hospital*	Philadelphia	P. S. Barba	1,359	1,274	13	11	1	7	1	50.00
†Graduate Hospital of the University of Pennsylvania*	Philadelphia		713	619	11	8	2	7/1	1	.....
Hahnemann Hospitals[a1]	Philadelphia	C. C. Fischer	1,186	5,909	34	25	1	.....	2	25.00
Hospital of the Univ. of Pennsylvania[a1]	Philadelphia	J. Stokes	316	3,412	39	27	6	Varies	2	.....
Hospital of the Women's Medical College of Pennsylvania[a1]	Philadelphia	E. P. Bacon	1,850	2,826	84	33	1	7/1	2	60.00
Jefferson Medical College Hospital*	Philadelphia		703	9,984	60	35	2	7/1	2	.....
Jewish Hospitals[a1]	Philadelphia		651	353	22	11	2	7	1	50.00
Philadelphia General Hospital[a1]	Philadelphia		1,061	.....	70	..	4	7/1	2	70.00
St. Christopher's Hospital for Children [1]	Philadelphia	W. E. Nelson	.....	.....	..	..	6	.....	1	.....
St. Luke's and Children's Medical Center[a1]	Philadelphia	J. L. Redman	505	.....	16	7	1	6/1	1	125.00
Temple University Hospitals[a1]	Philadelphia	W. E. Nelson	562	6,948	20	12	6	7/1	2	.....
Children's Hospital [1]	Pittsburgh		.....	.....	..	..	13	7	2	50.00
†St. Francis Hospital*	Pittsburgh	R. R. O'Toole	404	628	26	9	1	7/1	1	100.00
†Western Pennsylvania Hospital[a1]	Pittsburgh		1,656	848	..	..	1	10/1	1	.....
Robert Packer Hospital*	Sayre, Pa.	J. M. Higgins	457	417	13	10	1	7/1	2	150.00
†Charles V. Chapin Hospital [1]	Providence, R. I.	H. G. Calder	1,568	598	37	14	5	.....	1	.....
†Rhode Island Hospital[a1]	Providence, R. I.	W. P. Bluffum	1,158	2,843	31	17	2	7/1	1	50.00
Roper Hospital[a1]	Charleston, S. C.	M. W. Beach	1,073	7,773	66	31	4	7/1	2	25.00
Columbia Hospital[a1]	Columbia, S. C.	T. D. Dotterer	2,003	3,631	79	40	2	7/1	2	75.00
T. C. Thompson Children's Hospital	Chattanooga, Tenn.	H. J. Starr	2,448	9,230	117	59	3	7/1	1	90.00
Knoxville General Hospital*	Knoxville, Tenn.	H. S. Christian	934	1,079	58	11	1	7/1	1	70.00
†Baptist Memorial Hospital*	Memphis, Tenn.	W. L. Rucks	1,179	532	35	10	1	7/1	1	75.00
John Gaston Hospital*	Memphis, Tenn.	F. T. Mitchell	1,825	7,664	82	52	6	.....	2	.....
†Methodist Hospital[a1]	Memphis, Tenn.	C. V. Croswell	1,376	.....	43	25	2	7/1	2	75.00
St. Joseph Hospital[a1]	Memphis, Tenn.	H. J. Jacobson	1,517	473	30	16	1	.....	2	.....
George W. Hubbard Hospital of Meharry Medical College*	Nashville, Tenn.	E. P. Crump	534	5,937	34	17	3	7/1	2	75.00
Vanderbilt University Hospital[a1]	Nashville, Tenn.	A. Christie	942	10,852	100	77	5	7/1	2	35.41
Children's Medical Center	Dallas, Texas	H. L. Moore	.....	.....	74	42	12	7/1	2	50.00
†Parkland Hospital[a1]	Dallas, Texas	J. Bradford	447	2,935	41	24	2	.....	1	.....
University of Texas Medical Branch Hospitals[a1]	Galveston, Texas	A. E. Hansen	662	9,966	53	36	10	1/1, 7/1	2	50.00
†Hermann Hospital[a1]	Houston, Texas	R. J. Blattner	470	4,456	51	29	5	.....	1	50.00
Jefferson Davis Hospital[a1]	Houston, Texas	H. Schaffer	3,930	13,009	275	63	2	7/1	1	50.00
†Santa Rosa Hospital*	San Antonio, Texas	S. R. Kaliski	2,148	4,570	306	114	1	7/1	1	110.00
Salt Lake County General Hospital[a1]	Salt Lake City	J. A. Anderson	904	2,354	33	26	10	7/1	2	25.00
†Mary Fletcher Hospital*	Burlington, Vt.	S. Corbin	349	8	12	9	4	7/1	2	50.00
University of Virginia Hospitals[a1]	Charlottesville, Va.	W. W. Waddell, Jr.	482	4,219	62	32	4	7/1	2	62.00
Medical College of Virginia, Hosp. Div.[a1]	Richmond, Va.	L. Sutton, Jr.	1,232	6,991	86	44	8	7/1	2	46.50
Children's Orthopedic Hospital [1]	Seattle	J. I. Durand	2,528	6,232	40	30	3	4/1, 1/1	1	125.00
King County Hospital*	Seattle	W. B. Seelye	2,198	1,876	51	37	1	7/1	2	90.00
State of Wisconsin General Hospital[a1]	Madison, Wis.	J. E. Gonce, Jr.	709	4,008	34	28	3	7, 11	2	25.00
Milwaukee Children's Hospital [1]	Milwaukee		4,980	28,653	87	66	11	7	2	75.00
Milwaukee County Hospital[a1]	Milwaukee	R. P. Schowalter	2,646	4,676	57	4	3	Varies	2	158.09
†Kaukeolani Children's Hospital[a1]	Honolulu, Hawaii	F. D. Nance	3,541	.....	60	48	2	1/1	1	200.00

19. PHYSICAL MEDICINE

The following services are approved by the Council and the American Board of Physical Medicine Hospitals, 39; Assistant Residencies and Residencies, 65

Name of Hospital	Location	Chief of Service	Inpatients Treated	Number of Treatments	Asst. Res. and Residencies Offered [4]	Beginning of Service (1940)	Beginning Stipend (Month)
United States Army							
†Letterman General Hospital*	San Francisco	L. J. Butler	14,163	207,661	2	.....	n
†Fitzsimons General Hospital*	Denver	H. B. Luscombe	20,370	240,636	2	.....	n
Walter Reed General Hospital*	Washington, D. C.	E. M. Smith	6,849	174,825	1	1, 7	n
Veterans Administration							
†Veterans Admin. Hospital [1]	Ft. Logan, Colo.	C. C. Hoffman	2,875	48,162	1	.....	n
†Veterans Admin. Hospital	Chamblee, Ga.	G. D. Williams	1,905	37,824	1	7/1	n
†Veterans Admin. Hospital	Hines, Ill.	L. B. Newmann	12,600	486,539	7	.....	n
Veterans Admin. Hospital [1]	New Orleans, La.	S. Winokur	928	35,356	1	7/1	n
Veterans Admin. Hospital [1]	Framingham, Mass.		3,008	94,543	2	.....	n
†Veterans Admin. Hospital [1]	Jefferson Bks., Mo.		1,141	75,519	1	.....	n
†Veterans Admin. Hospital	New York City	H. Kessler	3,612	290,091	3	7	n
†Veterans Admin. Hospital [1]	Cleveland, Ohio	H. T. Zankel	14,030	142,719	..	.....	n
†Veterans Admin. Hospital	Portland, Ore.	E. W. Fowlks	4,078	95,079	1	1/1, 7/1	n
†Veterans Admin. Hospital	Aspinwall, Pa.	S. Machover	1,919	61,934	..	7/1	n

Numerical and other references will be found on page 225.

19. PHYSICAL MEDICINE—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Number of Treatments	Asst., Res. and Residencies Offered*	Beginning of Service (1949)	Beginning Stipend (Month)
Nonfederal							
Los Angeles County Hospital*‡	Los Angeles	.....	.....	114,657	1	Varies	$165.00
†White Memorial Hospital*	Los Angeles	F. B. Moor	231	.....	1	7/1	140.00
Stanford University Hospitals*‡	San Francisco	W. H. Northway	.....	7,445	2	7/1	50.00
†University of California Hospital*‡	San Francisco	L. Eising	.....	29,891	1	7/1, 8/1, 9/1	50.00
University of Colorado Medical Center							
†Colorado General Hospital*‡	Denver	H. L. Dinken	2,320	49,307	1	7/1	75.00
†Emory University Hospital*	Emory University, Ga.	R. Bennett	9,564	22,721	1	7/1	.....
†Georgia Warm Springs Foundation	Warm Springs, Ga.	.....	.....	.....	1	.....	.....
Michael Reese Hospital*‡	Chicago	C. O. Molander	2,078	25,219	2	.....	25.00
Passavant Memorial Hospital*	Chicago	.....	12,403	34,185	..	.....	.....
University of Kansas Medical Center*	Kansas City, Kan.	D. L. Rose	7,432	27,094	3	.....	.....
†Massachusetts General Hospital*	Boston	A. L. Watkins	.....	.....	2	.....	.....
†University of Minnesota Hospitals*‡	Minneapolis	M. Knapp	8,018	12,580	3	.....	.....
Mayo Foundation	Rochester, Minn.	F. H. Krusen	.....	.....	9	.....	92.50
†Bellevue Hospital, Div. III—N. Y. Univ.*‡	New York City	H. Rusk	35,406	63,198	4	.....	60.00
†Goldwater Memorial Hospital*‡	New York City	H. Behrend	950	69,483	1	7/1	70.00
†Hospital for Joint Diseases*‡	New York City	J. Weiss	62,557	87,314	2	1/1	40.00
†Hospital for Special Surgery	New York City	.....	.....	.....	..	.....	.....
†Montefiore Hospital for Chronic Diseases*‡	New York City	K. Harpuder	1,597	35,500	1	.....	.....
†Mount Sinai Hospital*‡	New York City	W. Bierman	2,610	52,705	1	.....	50.00
†Presbyterian Hospital*‡	New York City	W. B. Snow	71,514	198,791	1	.....	41.66
St. Luke's Hospital*	New York City	R. Muller	24,412	95,718	1	7	50.00
†Rehabilitation Hospital‡	W. Haverstraw, N. Y.	M. Hoberman	415	237,356	..	.....	.....
†Cleveland Clinic Hospital‡	Cleveland	W. J. Zeiter	16,660	37,691	1	7/1	100.00
†Hospital of the Univ. of Pennsylvania*‡	Philadelphia	G. M. Piersol	1,106	14,557	1	Varies	.....
†Medical College of Virginia, Hosp. Div.*‡	Richmond, Va.	W. J. Lee	3,047	31,433	1	7/1	46.50
†State of Wisconsin General Hospital*‡	Madison, Wis.	H. D. Bouman	1,988	18,291	2	.....	.....

20. PLASTIC SURGERY

The following services are approved by the Council and the American Board of Plastic Surgery
Hospitals, 18; Assistant Residencies and Residencies, 38

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Residencies Offered*	Beginning of Service (1949)	Beginning Stipend (Month)
Veterans Administration									
Veterans Admin. Hospital	Hines, Ill.	P. Greeley	609	.....	6	..	1	.....	n
†Veterans Admin. Hospital	New York City	P. K. Sauer	501	139	2	..	4	7	n
Nonfederal									
†Franklin Hospital*‡	San Francisco, Calif.	H. M. Blackfield	405	.....	..	..	2	7/1	$100.00
†University of Kansas Medical Center*	Kansas City, Kan.	D. W. Robinson	290	650	7	3	1	.....	.....
†Charity Hospital of Louisiana*‡	New Orleans	.....	.....	2,200	..	..	3	7/1	25.00
Blodgett Memorial Hospital*‡	Grand Rapids, Mich.	W. H. Steffenson	.....	746	..	..	1	7	100.00
Mayo Foundation	Rochester, Minn.	G. B. New	.....	.....	..	..	6	.....	92.50
Barnes Hospital*	St. Louis	J. B. Brown	1,043	.....	4	3	2	7/1	33.00
†Hospital of St. Barnabas and for Women and Children*	Newark, N. J.	L. A. Peer	.....	.....	..	..	2	.....	.....
Kings County Hospital*‡	Brooklyn	W. A. Coakley	1,023	2,800	37	3	2	7/1	80.00
Presbyterian Hospital*‡	New York City	J. P. Webster	329	3,215	..	..	4	.....	100.00
University Hospital*	New York City	J. W. Hinton	170	1,078	..	..	1	.....	.....
Strong Memorial-Rochester Municipal Hospitals*‡	Rochester, N. Y.	F. O. J. Young	273	384	..	..	1	7/1	45.00
†University Hospitals*	Oklahoma City	J. F. Burton	268	756	1	..	1	7/1	33.00
Graduate Hospital of the University of Pennsylvania*	Philadelphia	.....	104	39	..	..	1	7/1	.....
†Jefferson Medical College Hospital*	Philadelphia	.....	296	110	3	..	2	7/1	.....
†University of Texas Medical Branch Hospitals*‡	Galveston, Texas	T. G. Blocker	452	1,414	8	2	3	7/1	50.00
†State of Wisconsin General Hospital*‡	Madison, Wis.	W. Slaughter	370	.....	5	4	1	7	33.00

21. PROCTOLOGY

Hospitals, 12; Assistant Residencies and Residencies, 23

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Residencies Offered*	Beginning of Service (1949)	Beginning Stipend (Month)
United States Navy									
†U. S. Naval Hospital*	Oakland, Calif.	.....	.....	.....	..	..	1	.....	n
Nonfederal									
†Mercy Hospital-Loyola University Clinics*	Chicago	C. L. Martin	266	545	7	4	1	.....	.....
†City of Detroit Receiving Hospital*‡	Detroit	C. G. Johnston	132	910	2	..	1	.....	.....
Mayo Foundation	Rochester, Minn.	L. E. Buie	.....	.....	..	..	6	.....	$92.50
Millard Fillmore Hospital*	Buffalo	L. S. Knapp	349	.....	7	3	1	7/1	50.00
†Youngstown Hospital*	Youngstown, Ohio	P. J. Fury	435	48	11	4	1	7/1	100.00
Allentown Hospital*	Allentown, Pa.	M. Kleckner	441	118	..	..	1	7/1	.....
†Jefferson Medical College Hospital*	Philadelphia	.....	415	3,175	1	1	1	7/1	.....
†Temple University Hospital*‡	Philadelphia	H. E. Bacon	832	780	16	10	2	7/1	.....
†Presbyterian Hospital*‡	Pittsburgh	.....	.....	.....	..	..	5	.....	.....
Reading Hospital*‡	Reading, Pa.	F. G. Runyeon	428	398	4	3	1	7/1	100.00
†Milwaukee County Hospital*‡	Milwaukee	.....	222	504	..	..	2	Varies	158.02

Numerical and other references will be found on page 225.

22. PSYCHIATRY

The following services are approved by the Council and the American Board of Psychiatry and Neurology
Hospitals, 253; Assistant Residencies and Residencies, 1,595

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [4]	Beginning of Service (1949)	Length of Program (years)	Beginning Stipend (Month)
United States Army										
Letterman General Hospital[a]	San Francisco	E. B. Litteral	2,304	2,604	0	0	18	.....	3	n
†Fitzsimons General Hospital[a]	Denver, Colo.	D. B. Peterson	1,024	1,052	1	1	13	.....	3	n
Walter Reed General Hospital[a]	Washington, D. C.	E. R. Inwood	2,247	1,846	2	2	15	1, 7	2	n
†Brooke General Hospital[a]	San Antonio, Texas	R. E. Chambers	2,490	3,459	2	1	2	.....	2	n
United States Navy										
†U. S. Naval Hospital[a]	Bethesda, Md.	G. N. Raines	870	1,296	5	5	9	.....	3	n
†U. S. Naval Hospital[a]	Philadelphia		(Included in Neurology)				6	.....	2	n
†U. S. Naval Hospital[a]	Portsmouth, Va.		.....	.....	...	...	2	.....	1	n
United States Public Health Service										
U. S. Public Health Service Hospital [1]	Lexington, Ky.	K. W. Chapman	2,591	3,100	30	26	8	7/1	2	n
U. S. Marine Hospital [1]	New York City	V. T. Davis	2,656	1,485	10	3	7	7/1	2	n
U. S. Public Health Service Hospital [1]	Fort Worth, Texas	R. T. Hewitt	2,590	.....	...	...	10	.....	2	n
Federal Security Agency										
St. Elizabeths Hospital[a1]	Washington, D. C.	W. Overholser	7,980	.....	419	250	24	7/1	3	n
Veterans Administration										
†Veterans Admin. Hospital [1]	N. Little Rock, Ark.	W. Rottersman	.....	.....	...	...	8	7/1	3	n
†Veterans Admin. Center [1]	Los Angeles, Calif.	J. Pessin	2,931	326	172	104	30	1	3	n
Veterans Admin. Hospital [1]	Palo Alto, Calif.	J. J. Frusmack	2,318	7,418	58	41	30	1/1, 7/1	3	n
†Veterans Admin. Hospital [1]	Van Nuys, Calif.	H. H. DeJong	249	989	...	...	1	1/1, 7/1	3	n
†Veterans Admin. Hospital	Fort Lyon, Colo.	L. V. Lopez	1,597	0	27	18	3	1/1	2	n
†Veterans Admin. Hospital	Augusta, Ga.	H. M. Cleckly	2,356	2,790	49	20	1	.....	2	n
†Veterans Admin. Hospital [1]	Downey, Ill.	A. Rodriguez	2,796	459	44	25	9	6/1, 1/1	2	n
Veterans Admin. Hospital	Hines, Ill.	F. G. Gerty	1,461	.....	26	8	9	.....	3	n
†Veterans Admin. Hospital [1]	Marion, Ind.	S. T. Ginsberg	2,621	.....	77	37	4	.....	3	n
Veterans Admin. Hospital	Knoxville, Iowa		.....	.....	...	...	...	.....	2	n
Veterans Admin. Hosp. tal [1]	Topeka, Kan.	H. C. Modlin	2,135	.....	16	10	86	7/1	3	n
†Veterans Admin. Hospital [1]	Lexington, Ky.		.....	.....	...	...	4	.....	2	n
†Veterans Admin. Hospital [1]	Louisville, Ky.	D. F. Moore	233	26	...	...	3	.....	1	n
Veterans Admin. Hosp. tal [1]	New Orleans, La.	H. T. Posey	295	155	1	1	1	7/1	2	n
†Veterans Admin. Hospital [1]	Perry Point, Md.	W. G. Reese	3,027	.....	66	39	20	7	3	n
Veterans Admin. Hospital [1]	Bedford, Mass.	J. L. Hofman	2,907	35,000	47	25	17	7/1	1	n
Veterans Admin. Hospital (West Roxbury) [1]	Boston		(Included in Neurology)				4	.....	1	n
†Veterans Admin. Hospital [1]	Framingham, Mass.		438	.....	6	3	14	7/1	3	n
†Veterans Admin. Hospital [1]	Fort Custer, Mich.	A. L. Olsen	3,034	542	59	49	9	7/1	3	n
†Veterans Admin. Hospital	Minneapolis		464	.....	3	2	16	.....	3	n
†Veterans Admin. Hospital	St. Cloud, Minn.		.....	.....	...	...	2	.....	2	n
†Veterans Admin. Hospital [1]	Gulfport, Miss.	J. J. Blasko	1,045	1,398	30	27	2	1/1	2	n
†Veterans Admin. Hospital	Jefferson Bks., Mo.		427	.....	0	...	..	.....	3	n
†Veterans Admin. Hospital [1]	Lyons, N. J.		.....	.....	...	...	11	9/1	3	n
†Veterans Admin. Hospital [1]	Canandaigua, N. Y.	E. M. Levy	1,836	66	44	28	4	7/1	1	n
Veterans Admin. Hospital	New York City	H. Flowers	717	129	4	4	23	1, 7	3	n
†Veterans Admin. Hospital [1]	Northport, N. Y.		.....	.....	...	...	29	.....	3	n
†Veterans Admin. Hospital	Chillicothe, Ohio		.....	.....	...	...	..	.....	2	n
†Veterans Admin. Hospital [1]	Cleveland	L. Halle	821	500	4	2	11	.....	3	n
†Veterans Admin. Hospital [1]	Coatsville, Pa.	A. O. Hecker	2,050	30	50	36	37	7/1	3	n
†Veterans Admin. Hospital	Memphis, Tenn.	S. Paster	1,042	1,078	8	5	6	7/1	3	n
†Veterans Admin. Hospital [1]	McKinney, Texas	C. V. Taylor	.....	.....	...	...	1	.....	3	n
†Veterans Admin. Hospital [1]	Waco, Texas	T. J. Hardgrove	4,107	.....	84	50	7	1/1, 7/1	2	n
†Veterans Admin. Hospital [1]	Richmond, Va.	B. Nagler	851	.....	9	7	2	7/1	3	n
†Veterans Admin. Hospital [1]	Roanoke, Va.	L. G. Sewall	3,990	.....	69	31	1	.....	3	n
†Veterans Admin. Center [1]	Milwaukee	D. L. Lieberman	1,096	600	28	18	4	.....	2	n
†Veterans Admin. Hospital	Tomah, Wis.	N. C. Mace	887	1,259	30	11	4	1	2	n
Nonfederal										
†Jefferson-Hillman Hospital[a1]	Birmingham, Ala.		.....	.....	...	...	..	.....	1	.....
†Herrick Memorial Hospital[a1]	Berkeley, Calif.	A. E. Bennett	.....	.....	...	...	1	7/1	2	$50.00
Compton Sanitarium [1]	Compton, Calif.	G. E. Myers	625	0	5	4	4	1/1, 7/1	2	250.00
Napa State Hospital [1]	Imola, Calif.	W. A. Oliver	5,390	350	429	94	2	1/1	1	255.00
Livermore Sanitarium	Livermore, Calif.		834	500	13	2	1	7	1	275.00
Los Angeles County Hospital[a1]	Los Angeles	M. G. Carter	7,200	.....	100	25	2	Varies	3	165.00
†Patton State Hospital [1]	Patton, Calif.		.....	.....	...	...	2	.....	1	.....
Langley-Porter Clinic [1]	San Francisco	K. M. Bowman	303	12,909	...	...	47	Varies	3	255.00
Mount Zion Hospital[a]	San Francisco	N. Reider	17	5,038	...	...	3	.....	2	50.00
Stanford University Hospitals[a1,7]	San Francisco	G. S. Johnson	.....	.....	...	...	1	7/1	2	50.00
University of California Hospital[a1]	San Francisco	K. M. Bowman	2,639	.....	...	...	1	7/1,8/1,9/1	3	50.00
Pasadena Sanitarium [1]	S. Pasadena, Calif.		.....	.....	...	...	..	.....	1	150.00
†Pacific Colony [1]	Spadra, Calif.	G. Tarjan	2,200	75	30	13	3	7/1	1	255.00
†Stockton State Hospital [1]	Stockton, Calif.	F. H. Adams	6,140	168	402	85	1	1/1	1	255.00
Mendocino State Hospital [1]	Talmage, Calif.	D. B. Williams	.....	.....	...	...	2	.....	2	.....
University of Colorado Medical Center Colorado Psychopathic Hospital [1]	Denver	F. G. Ebaugh	1,032	5,637	20	13	25	7/1	3	125.00
Colorado State Hospital [1]	Pueblo, Colo.	F. H. Zimmerman	1,080	.....	400	186	6	.....	2	275.00
Institute of Living (Neuro-Psychiatric Institute of the Hartford Retreat) [1]	Hartford, Conn.	C. C. Burlingame	1,243	.....	10	2	3	Varies	3	275.00
Connecticut State Hospital [1]	Middletown, Conn.		.....	.....	...	...	3	.....	2	.....
†Silver Hill Foundation	New Canaan, Conn.		.....	.....	...	...	2	.....	1	.....
Grace-New Haven Community Hospital New Haven Unit (University Service)[a1]	New Haven, Conn.	F. Redlich	358	2,951	2	2	7	7/1	2	40.00
†Fairfield State Hospital	Newtown, Conn.	J. E. Oltman	3,374	250	264	187	5	7/1	2	200.00
Norwich State Hospital [1]	Norwich, Conn.	C. O. Ranger	3,486	112	268	53	1	.....	2	200.00
Delaware State Hospital [1]	Farnhurst, Del.	M. A. Tarumianz	.....	.....	98	25	7	1, 7	2	125.00
Gallinger Municipal Hospital[a1]	Washington, D. C.		4,910	.....	105	18	1	7/1	1	125.00
†George Washington University Hospital[a1]	Washington, D. C.	W. Overholser	60	.....	...	...	..	.....	2	50.00

Numerical and other references will be found on page 225.

22. PSYCHIATRY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Clerkships Offered	Beginning of Service (July)	Length of Approved Program (years)	Beginning Stipend (Month)
†University Hospitals[a]	Augusta, Ga.	H. M. Cleckley	382	.....	7	2	1	7	1	$ 40.00
†Emory University Hospital[a]	Emory University, Ga.		(Included in Internal Medicine)				4	.....	1	.....
†Alton State Hospital [1]	Alton, Ill.		.....	.....	...	...	4	.....	1	.....
†Anna State Hospital [1]	Anna, Ill.	C. D. Nobles	.....	.....	...	...	..	.....	1	.....
Chicago State Hospital [1]	Chicago	I. Spinka	7,275	1,387	711	143	5	1/1	2	200.00
Cook County Hospital[a1]	Chicago	C. A. Neyman	9,053	.....	174	...	6	1, 7	2	75.00
Illinois Neuropsychiatric Institute [1]	Chicago	F. J. Gerty	276	8,021	...	...	10	.....	3	.....
†Loretto Hospital[a]	Chicago	J. J. Madden	469	1,018	4	4	1	.....	1	.....
Michael Reese Hospital[a1,7]	Chicago	R. R. Grinker	240	5,885	...	...	12	1/1, 7	3	.....
St. Luke's Hospital[a]	Chicago	F. J. Gerty	316	.....	5	3	1	.....	1	.....
University of Chicago Clinics[a1]	Chicago	H. Brosin	150	6,957	...	...	3	7/1	3	95.00
Veterans Rehabilitation Center [1]	Chicago	D. Slight	127	4,776	...	...	5	.....	1	200.00
Wesley Memorial Hospital[a1]	Chicago	T. T. Stone	554	.....	1	...	1	.....	1	25.00
†Dixon State Hospital	Dixon, Ill.		.....	.....	...	...	..	.....	1	.....
Elgin State Hospital [1]	Elgin, Ill.	E. Liebert	8,064	2,505	460	165	11	.....	3	200.00
†Jacksonville State Hospital [1]	Jacksonville, Ill.	H. Hoffman	.....	.....	...	...	4	.....	1	.....
†Kankakee State Hospital [1]	Kankakee, Ill.	C. J. Katz	.....	.....	...	...	1	.....	1	200.00
†Lincoln State School and Colony [1]	Lincoln, Ill.	W. W. Fox	.....	.....	...	2	2	7	1	87.00
Manteno State Hospital [1]	Manteno, Ill.	M. Wallenberg	9,412	.....	632	105	1	7/1	2	.....
Peoria State Hospital [1]	Peoria, Ill.		.....	.....	...	...	2	.....	2	.....
†North Shore Health Resort [1]	Winnetka, Ill.	S. Liebman	455	.....	5	4	2	7/1	1	50.00
Central State Hospital	Indianapolis		.....	.....	...	...	4	.....	2	.....
Indianapolis General Hospital[a]	Indianapolis	E. W. Mericle	705	1,117	31	16	3	7/1	3	80.00
†Norways Sanatorium [1]	Indianapolis	P. B. Reed	352	685	8	...	1	.....	2	200.00
Logansport State Hospital	Logansport, Ind.		.....	.....	...	...	1	.....	2	425.00
†Cherokee State Hospital	Cherokee, Iowa		.....	.....	...	...	1	.....	1	.....
†St. Bernard's Hospital	Council Bluffs, Iowa	W. E. Ash	938	.....	21	0	1	.....	1	.....
Iowa State Psychopathic Hospital [1]	Iowa City	W. R. Miller	846	2,337	0	0	5	7/1	3	93.00
Menninger Sanitarium [1]	Topeka, Kan.	R. L. Worthington	152	.....	1	...	3	.....	3	.....
†Louisville General Hospital[a1]	Louisville, Ky.	S. S. Ackerly	661	2,124	19	5	2	.....	2	.....
Charity Hospital of Louisiana[a1]	New Orleans		.....	8,645	(Included in Neurology)				1	.....
†DePaul Sanitarium [1]	New Orleans	H. O. Colomb	1,100	700	13	3	3	1/1, 7/1	1	300.00
†Ochsner Foundation Hospital [1,11,15]	New Orleans	T. L. L. Soniat	354	3,071	...	...	3	7/1	2	225.00
Johns Hopkins Hospital[a]	Baltimore	J. C. Whitehorn	309	4,514	9	9	12	7/1	3	41.66
†Seton Institute	Baltimore	D. Ross and W. Muncie	647	0	14	0	8	7/1	2	125.00
Spring Grove State Hospital	Catonsville, Md.		3,270	2,554	155	48	16	.....	2	.....
†Chestnut Lodge Sanitarium [1]	Rockville, Md.	F. Fromm-Reichmann	.....	.....	...	...	6	7	2	175.00
Springfield State Hospital	Sykesville, Md.		3,726	.....	180	55	10	.....	2	.....
Sheppard and Enoch Pratt Hospital [1]	Towson, Md.		423	121	10	4	7	2	2	100.00
†Beth Israel Hospital[a1]	Boston	G. L. Bibring	.....	955	...	...	1	7/1	1	300.00
Boston Psychopathic Hospital [1]	Boston	H. C. Solomon	1,298	8,249	4	2	14	9	3	170.00
Boston State Hospital [1]	Boston	E. V. Semrad	4,342	0	391	74	4	.....	2	.....
Massachusetts General Hospital[a]	Boston	S. Cobb	193	.....	...	...	7	.....	2	.....
†Massachusetts Mental Hospital[a1]	Boston	W. Malamud	.....	2,391	...	...	1	8/2	3	50.00
†New England Center Hospital [1]	Boston	R. D. Adams	1,143	327	...	...	2	7/1	1	83.33
†Peter Bent Brigham Hospital[a1]	Boston		(Included in Medicine)						1	.....
Foxboro State Hospital [1]	Foxboro, Mass.	J. T. Shea	1,507	267	94	22	2	1/1, 4/1	2	400.00
Gardner State Hospital [1]	Gardner, Mass.	C. E. Thompson	1,629	551	83	5	9	.....	2	.....
Danvers State Hospital [1]	Hawthorne, Mass.	P. B. Hagopian	3,209	583	247	55	2	.....	2	170.00
Medfield State Hospital [1]	Medfield, Mass.	E. K. Holt	.....	.....	...	...	2	.....	2	.....
Northampton State Hospital [1]	Northampton, Mass.	J. H. F. Longpre	.....	.....	...	...	10	.....	2	300.00
Grafton State Hospital [1]	North Grafton, Mass.		2,099	1,172	111	39	2	7/1	2	170.00
Monson State Hospital	Palmer, Mass.	R. G. Osterheld	1,466	175	...	...	2	.....	1	.....
†Austen Riggs Foundation [1]	Stockbridge, Mass.	R. P. Knight	139	282	...	...	2	7/1	1	500.00
Taunton State Hospital [1]	Taunton, Mass.	B. E. Zawacki	733	1,497	209	88	5	7/1	2	300.00
Metropolitan State Hospital [1]	Waltham, Mass.	W. C. Gaebler	1,907	.....	198	84	2	1/1	1	.....
McLean Hospital [1]	Waverley, Mass.	W. F. Wood	.....	.....	17	7	4	.....	2	.....
Westboro State Hospital [1]	Westboro, Mass.	R. V. Hadley	2,380	602	159	16	2	.....	2	.....
†Worcester City Hospitals[a1]	Worcester, Mass.	F. Vibber	.....	.....	...	...	..	7/1	1	50.00
Worcester State Hospital	Worcester, Mass.	D. Rothschild	3,676	600	268	38	14	Varies	3	.....
University Hospitals[a]	Ann Arbor, Mich.	R. W. Waggoner	586	7,787	1	1	14	7/1	3	111.80
†St. Joseph's Retreat	Dearborn, Mich.	M. H. Hoffman	1,382	.....	11	3	..	.....	1	.....
City of Detroit Receiving Hospital[a1]	Detroit	T. V. Hoagland	6,160	85	96	45	6	7/1	1	188.00
Henry Ford Hospital[a1,7]	Detroit	T. J. Heidt	733	10,356	33	12	4	7/1	3	300.00
Wayne County General Hospital and Infirmary[a]	Eloise, Mich.	L. S. Lipschutz	5,529	3,728	309	69	6	1/1, 7/1	3	235.00
†Ionia State Hospital	Ionia, Mich.	G. H. Cook	.....	.....	...	...	..	.....	2	335.00
Kalamazoo State Hospital [1]	Kalamazoo, Mich.	C. M. Schrier	3,876	2,235	295	17	4	1/1	2	335.00
†Newberry State Hospital	Newberry, Mich.		1,063	2,749	137	10	..	.....	1	.....
Pontiac State Hospital [1]	Pontiac, Mich.	P. V. Wagley	3,033	149	206	49	5	Varies	2	335.00
Traverse City State Hospital [1]	Traverse City, Mich.	R. P. Sheets	3,486	1,295	237	58	6	.....	2	335.00
Ypsilanti State Hospital [1]	Ypsilanti, Mich.	O. R. Yoder	4,775	764	275	73	13	Varies	2	335.00
Minneapolis General Hospital[a1,7]	Minneapolis		(Included in Neurology)				1	.....	1	.....
University of Minnesota Hospitals[a1]	Minneapolis	D. W. Hastings	303	2,086	1	...	7	.....	3	.....
Mayo Foundation	Rochester, Minn.	F. J. Braceland	.....	.....	...	...	..	.....	1	.....
†Rochester State Hospital	Rochester, Minn.		2,148	0	179	81	8	.....	1	.....
State Hospital No. 1	Fulton, Mo.	W. J. Cremer	2,525	0	266	48	1	9	2	150.00
Kansas City General Hospital No. 1[a1]	Kansas City, Mo.	M. L. Bills	(Included in Neurology)				1	.....	1	50.00
State Hospital No. 2	St. Joseph, Mo.		.....	.....	...	...	2	.....	2	100.00
Barnes Hospital[a1]	St. Louis	E. F. Gildea	504	7,175	2	1	14	7/1	3	25.00
Homer G. Phillips Hospital[a1]	St. Louis	E. F. Gildea	(Included in Neurology)				1	.....	2	95.00
St. Louis City Hospitals[a1]	St. Louis	T. Thalo	3,686	367	150	33	7	7/1	3	95.00
St. Louis State Hospital [1]	St. Louis	L. H. Kohler	3,920	.....	109	57	5	7/1	2	150.00
St. Vincent's Sanitarium	St. Louis	P. E. Kubitschek	649	.....	22	11	1	7/1	1	200.00
Hastings State Hospital [1]	Ingleside, Neb.	J. C. Nielsen	2,390	260	...	...	2	7/1	2	300.00
Norfolk State Hospital [1]	Norfolk, Neb.		1,342	1,165	74	98	3	.....	2	300.00
†Lutheran Hospital [1]	Omaha	R. Young	806	.....	6	4	1	1/1	1	150.00
†University of Nebraska Hospitals[a1]	Omaha		.....	.....	...	...	..	.....	1	.....
New Hampshire State Hospital [1]	Concord, N. H.	J. L. Smalldon	3,437	.....	319	39	3	1/1	2	135.75
†Essex County Overbrook Hospital [1]	Cedar Grove, N. J.	H. G. Smith	3,355	763	316	93	4	.....	1	.....
New Jersey State Hospital [1]	Greystone Park, N. J.	M. A. Curry	7,515	.....	579	59	5	.....	2	300.00
New Jersey State Hospital [1]	Marlboro, N. J.		4,126	1,558	317	194	2	.....	2	100.00

Numerical and other references will be found on page 225.

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22. PSYCHIATRY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Length of Approved Program (years)	Beginning Stipend (Month)
New Jersey State Hospital	Trenton, N. J.	H. S. Magee	5,011	.....	298	54	5	.....	2	$100.00
Albany Hospital[a1,†]	Albany, N. Y.	S. E. Barrora	1,514	332	39	24	4	7/1	3	41.67
†South Oaks, Long Island Home [1]	Amityville, N. Y.	A. Rolo	690	.....	17	...	3	7/1	1	250.00
†Craig House	Beacon, N. Y.		.....	.....	.....	...	...	.....	1	.....
†Matteawan State Hospital	Beacon, N. Y.	J. F. McNeill	1,641	.....	39	12	6	4/1	1	200.00
Hillside Hospital [1]	Bellerose, N. Y.	J. S. A. Miller	418	635	2	...	6	1/1	2	150.00
Binghamton State Hospital [1]	Binghamton, N. Y.		.....	.....	.....	...	3	9/1	2	300.00
Brooklyn State Hospital [1]	Brooklyn		5,825	5,439	613	66	16	.....	3	.....
†Kings County Hospital[a1]	Brooklyn	H. Potter	9,325	5,026	246	19	11	7/1	1	130.00
Buffalo State Hospital [1]	Buffalo	C. Fletcher	3,478	15	257	61	2	.....	2	250.00
Edward J. Meyer Memorial Hospital[a1]	Buffalo	L. A. Osborn	1,937	695	89	37	5	7/1	2	100.00
Central Islip State Hospital [1]	Central Islip, N. Y.	D. Corcoran	9,595	3,118	582	137	8	.....	3	.....
Gowanda State Homeopathic Hospital [1]	Helmuth, N. Y.	P. J. Tomlinson	2,994	3,205	204	50	5	.....	2	300.00
†Pinewood Sanitarium [1]	Katonah, N. Y.	L. Wender	237	.....	2	...	1	.....	1	.....
Kings Park State Hospital [1]	Kings Park, N. Y.		8,951	3,147	473	...	11	.....	2	.....
†River Crest Sanitarium	Long Island City, N. Y.	M. Dollin	.....	.....	.....	...	2	9/1	1	.....
Marcy State Hospital	Marcy, N. Y.		3,288	.....	.....	25	4	.....	2	.....
Middletown State Homeopathic Hospital [1]	Middletown, N. Y.	W. A. Schmitz	3,753	883	208	81	5	.....	2	304.00
Bellevue Hospital, Div. III—N. Y. Univ.[a1]	New York City	S. B. Wortis	21,214	10,671	935	208	58	.....	3	65.00
Manhattan State Hospital [1]	New York City	J. H. Travis	5,459	2,061	711	139	14	Varies	2	304.16
†Mount Sinai Hospital[a1]	New York City	M. R. Kaufman	.....	.....	.....	...	3	.....	...	50.00
New York Hospital[a]	New York City	O. Diethelm	1,210	7,143	.....	...	13	7/1	3	50.00
New York State Psychiatric Institute [1]	New York City	I. H. MacKinnon	354	1,361	1	1	21	.....	3	.....
St. Lawrence State Hospital [1]	Ogdensburg, N. Y.		2,639	972	103	3	4	.....	2	.....
Rockland State Hospital [1]	Orangeburg, N. Y.		.....	.....	.....	...	8	.....	2	.....
†Stony Lodge Sanitarium [1]	Ossling, N. Y.	B. C. Glueck, Jr.	84	162	...	...	2	1/1	1	150.00
Hudson River State Hospital [1]	Poughkeepsie, N. Y.	W. C. Groom	5,998	781	403	77	2	.....	2	.....
Creedmore State Hospital	Queens Village, N. Y.	H. A. LaBurt	6,830	3,331	448	74	9	.....	2	304.00
Rochester State Hospital [1]	Rochester, N. Y.	K. K. Slaght	3,907	4,767	353	45	4	Varies	2	304.00
Strong Memorial—Rochester Municipal Hospitals[a1]	Rochester, N. Y.	J. Romano	439	2,329	3	2	11	7/1	2	45.00
Syracuse Psychopathic Hospital [1]	Syracuse, N. Y.	M. F. Brew	716	1,088	7	2	2	.....	2	304.00
†Letchworth Village [1]	Thiells, N. Y.	J. Campbell	4,332	25	73	35	2	.....	2	316.00
Utica State Hospital [1]	Utica, N. Y.		2,359	2,938	184	25	2	.....	2	.....
Grasslands Hospitals[a1]	Valhalla, N. Y.	F. V. Rockwell	1,322	1,308	52	29	7	7	2	125.00
Pilgrim State Hospital [1]	W. Brentwood, N. Y.	H. J. Worthing	9,150	2,767	867	116	20	.....	2	.....
New York Hospital—Westchester Division [1]	White Plains, N. Y.		691	.....	11	1	9	1/1, 7/1	3	125.00
†Willard State Hospital [1]	Willard, N. Y.		.....	.....	.....	...	5	.....	2	.....
Harlem Valley State Hospital [1]	Wingdale, N. Y.	A. M. Stanley	5,431	1,003	293	103	4	Varies	2	.....
Duke Hospital[a1]	Durham, N. C.	R. S. Lyman	223	1,563	.....	...	20	7/1	3	$3.33
†North Carolina Baptist Hospital[a1]	Winston-Salem, N. C.	L. J. Thompson	(Included in Medicine)				4	7/1	2	.....
†Windsor Hospital	Chagrin Falls, Ohio		.....	.....	.....	...	...	.....	1	.....
†Christ Hospital[a]	Cincinnati	H. D. Fabing	666	.....	.....	...	1	7/1	1	75.00
Cincinnati General Hospital[a1]	Cincinnati	M. Levine	1,192	719	20	9	19	7/1	3	.....
Longview State Hospital [1]	Cincinnati		.....	.....	.....	...	3	.....	2	.....
†Cleveland Clinic Hospital [1]	Cleveland	L. J. Karnosh	(Included in Neurology)				2	.....	2	.....
†Cleveland State Hospital [1]	Cleveland	E. H. Crawfis	.....	.....	.....	...	2	7/1	1	200.00
Cleveland State Receiving Hospital	Cleveland	F. E. Merritt	1,200	.....	44	24	13	7/1	3	.....
†University Hospitals[a1]	Cleveland	D. D. Bond	24	4,007	1	...	1	7/1	2	25.00
Columbus State Hospital [1]	Columbus, Ohio	J. F. Bateman	2,960	750	167	80	3	7	2	250.00
Massillon State Hospital	Massillon, Ohio		.....	.....	.....	...	3	.....	2	.....
Harding Sanitarium [1]	Worthington, Ohio	H. Evans	519	3,102	9	...	3	.....	2	.....
†Central Oklahoma State Hospital [1]	Norman, Okla.	D. W. Griffin	2,852	.....	199	2	2	.....	1	.....
Oregon State Hospital	Salem, Ore.		.....	.....	.....	...	2	.....	2	.....
†Allentown State Hospital [1]	Allentown, Pa.	H. F. Hoffman	2,966	413	154	21	4	.....	2	225.00
Danville State Hospital [1]	Danville, Pa.		2,870	1,271	147	20	3	.....	2	.....
Harrisburg State Hospital [1]	Harrisburg, Pa.	H. K. Petry	2,926	480	178	74	2	.....	2	351.00
Norristown State Hospital [1]	Norristown, Pa.	A. P. Noyes	5,009	.....	295	97	15	.....	2	357.50
Friends Hospital [1]	Philadelphia	T. L. Dehne	427	1,474	18	7	4	7/1	2	200.00
†Hospital of the University of Pennsylvania[a1]	Philadelphia	K. Appel	.....	4,443	...	...	8	Varies	2	.....
Institute of the Pennsylvania Hospital [1]	Philadelphia	L. H. Smith	.....	.....	.....	...	14	.....	3	166.60
Jefferson Medical College Hospital[a]	Philadelphia		39	2,007	.....	...	2	7/1	1	.....
Pennsylvania Hospital, Department for Mental and Nervous Diseases [1]	Philadelphia	L. H. Smith	.....	.....	.....	...	15	.....	3	166.60
Philadelphia Psychiatric Hospital [1]	Philadelphia		481	1,472	3	...	5	7	2	100.00
Philadelphia State Hospital [1]	Philadelphia		.....	.....	.....	...	6	.....	2	.....
Temple University Hospital[a1]	Philadelphia	O. S. English	.....	2,481	.....	...	5	7/1	2	.....
St. Francis Hospital[a1]	Pittsburgh		3,255	440	81	14	3	7/1	2	100.00
Western State Psychiatric Institute and Clinic [1]	Pittsburgh	R. A. Clark	428	6,025	8	5	12	7/1	3	256.50
Warren State Hospital [1]	Warren, Pa.	R. H. Israel	3,533	.....	.....	...	4	7/1	2	257.00
†Woodville State Hospital [1]	Woodville, Pa.	R. J. Phifer	2,487	.....	.....	...	4	.....	2	.....
State Hospital for Mental Diseases [1]	Howard, R. I.	J. F. Regan	3,808	261	305	65	8	Varies	2	333.30
Butler Hospital [1]	Providence, R. I.	D. G. Wright	345	1,910	27	10	6	.....	1	175.00
Charles V. Chapin Hospital [1]	Providence, R. I.	T. L. Greason	251	788	21	7	2	Varies	1	172.50
†Vanderbilt University Hospital[a1]	Nashville, Tenn.	W. F. Orr	.....	.....	.....	...	3	7/1	2	35.41
†Beverly Hills Sanitarium [1]	Dallas, Texas	S. Weiz	1,021	586	13	...	4	7/1	1	200.00
†Parkland Hospital[a1]	Dallas, Texas		.....	.....	.....	...	...	.....	1	.....
†Timberlawn Sanitarium	Dallas, Texas	G. F. Witt	529	.....	2	1	5	1/1, 7/1	2	300.00
†Galveston State Psychopathic Hospital [1]	Galveston, Texas	J. R. Ewalt	1,419	.....	6	6	12	9	3	200.00
University of Texas Medical Branch Hosps.[a]	Galveston, Texas	T. H. Harris	904	.....	14	6	7	7	2	200.00
†Vermont State Hospital [1]	Waterbury, Vt.	R. A. Chittick	1,612	.....	120	58	2	.....	1	.....
University of Virginia Hospital[a1]	Charlottesville, Va.	D. C. Wilson	606	1,761	8	5	6	7/1	3	.....
Medical College of Virginia Hospital Division[a1]	Richmond, Va.	R. F. Gayle, Jr.	569	2,126	9	3	4	7/1	3	46.50
Western State Hospital [1]	Ft. Steilacoom, Wash.	R. H. Rea	3,536	.....	301	149	5	.....	2	.....
Eastern State Hospital [1]	Medical Lake, Wash.	H. A. Perry	2,576	910	260	7	1	7/1	2	350.00
Northern State Hospital [1]	Sedro Woolley, Wash.	F. E. Shovlain	.....	.....	.....	...	2	.....	2	.....
State of Wisconsin General Hospitals[a1]	Madison, Wis.	M. Masten	941	548	27	30	5	7	3	25.00
Milwaukee County Hospital for Mental Diseases [1]	Milwaukee	M. Kasak	1,686	1,177	41	19	9	Varies	2	150.58
Milwaukee Sanitarium [1]	Wauwatosa, Wis.	J. A. Kindwall	474	.....	7	5	1	.....	2	.....
Queen's Hospital[a1]	Honolulu, Hawaii	R. Kepner	1,115	167	4	3	2	7	2	75.00

Numerical and other references will be found on page 225.

23. PULMONARY DISEASES

The following services are approved by the Council and the American Board of Internal Medicine Hospitals, 128; Assistant Residencies and Residencies, 445

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Residencies Offered [4]	Beginning of Service (1949)	Beginning Stipend (Month)
United States Army									
†Fitzsimons General Hospital*	Denver	C. W. Tempel	2,519	2*4	76	60	6	.....	n
Federal Security Agency									
†Freedmen's Hospital*[3]	Washington, D. C.	H. Payne	102	6,008	50	15	3	7/1	n
Veterans Administration									
†Veterans Admin. Hospital [1]	San Fernando	D. Solkin	711	3,511	59	26	1	.....	n
†Veterans Admin. Hospital [1]	Van Nuys, Calif.	J. D. Davis	905	3,009	46	37	8	1/1, 7/1	n
Veterans Admin. Hospital [1]	Ft. Logan, Colo.	D. W. Zahn	150	150	10	7	..	1	n
†Veterans Admin. Hospital	Hines, Ill.	H. C. Sweany	936	.....	117	40	1	.....	n
†Veterans Admin. Hospital	Alexandria, La.	L. B. Newman	.....	.....	..	..	6	.....	n
†Veterans Admin. Hospital	Rutland Hghts., Mass.	S. T. Allison	1,155	586	90	47	1	.....	n
Veterans Admin. Hospital	Minneapolis, Minn.		208	.....	18	12	..	.....	n
†Veterans Admin. Hospital	Excelsior Springs, Mo.	L. Levin	627	.....	41	21	6	.....	n
Veterans Admin. Hospital [1]	Castle Point, N. Y.	J. K. Deegan	527	3,037	76	44	..	.....	n
†Veterans Admin. Hospital [1]	Staten Island, N. Y.	V. F. Woolf	229	.....	27	16	4	7/1	n
†Veterans Admin. Hospital	Sunmount, N. Y.	N. D. E'Esopo	.....	.....	..	..	..	.....	n
†Veterans Admin. Hospital	Oteen, N. C.		.....	.....	..	..	1	.....	n
†Veterans Admin. Hospital [1]	Brecksville, Ohio	N. S. Greene	674	211	42	10	3	.....	n
Veterans Admin. Hospital [1,25]	McKinney, Texas	F. K. Reichsman	.....	.....	..	..	4	.....	n
†Veterans Admin. Hospital	Walla Walla, Wash.	L. S. Arany	691	288	35	19	1	.....	n
†Veterans Admin. Center [1]	Milwaukee, Wis.		.....	.....	..	..	..	.....	n
Nonfederal									
Los Angeles Sanatorium [1]	Duarte, Calif.	A. Goldman	429	.....	33	12	6	.....	.....
Arroyo-Del Valle Sanatorium	Livermore, Calif.	C. Bush	501	.....	43	0	1	.....	.....
Barlow Sanatorium [1]	Los Angeles	H. W. Bosworth	87	1,277	1	1	2	7/1	$100.00
Los Angeles County Hospital*[1]	Los Angeles	C. R. Howson	1,572	3,808	368	71	3	Varies	165.00
Pottenger Sanatorium and Clinic [1]	Monrovia, Calif.	F. M. Pottenger	164	1,373	18	2	1	.....	.....
Bret Harte Sanatorium	Murphys, Calif.	F. P. Smart	440	5,383	20	4	2	.....	385.00
Olive View Sanatorium [1]	Olive View, Calif.	C. E. Babcock	1,901	0	84	25	18	.....	575.00
San Diego County General Hospital*	San Diego, Calif.	P. O'Hara	210	2,401	44	14	3	7/1	125.00
San Francisco Hospital*[1]	San Francisco		929	.....	204	22	4	.....	175.00
Santa Clara County Hospital*	San Jose, Calif.	C. Ianne	4,069	4,069	45	2	2	7/1	235.00
Fairmont Hospital of Alameda County [1]	San Leandro, Calif.	J. L. Eaton	157	1,934	49	12	1	7/1	145.00
†Tulare-Kings Counties Joint Tuberculosis Hospital [1]	Springfield, Calif.	W. A. Winn	247	1,656	7	4	2	7/1	425.00
National Jewish Hospital [1]	Denver	A. Hurst	511	....	17	12	16	7	100.00
University of Colorado Medical Center Denver General Hospital*[1]	Denver	D. Reisner	154	6,637	32	11	1	7	40.00
Sanatorium of the Jewish Consumptives' Relief Society	Spivak, Colo.	M. Chernyk	315	1,753	17	9	4	.....	150.00
Undercliff Sanatorium [1]	Meriden, Conn.	C. B. Gibson	377	3,412	32	2	4	7/1	338.66
Norwich State Tuberculosis Sanatorium (Uncas-on-Thames)	Norwich, Conn.		598	3,654	73	12	1	.....	.....
Laurel Heights State Tuberculosis Sanatorium	Shelton, Conn.		434	2,474	33	5	2	.....	.....
Gaylord Farm Sanatorium [1]	Wallingford, Conn.		279	3,000	3	1	2	.....	.....
Tuberculosis Sanatorium (Glen Dale, Md. P. O.)	Washington, D. C.	D. L. Finucane	1,082	.....	169	75	3	.....	220.40
†City of Chicago Municipal Tuberculosis Sanitarium	Chicago		725	.....	..	..	2	.....	.....
University of Chicago Clinics*[1]	Chicago	R. G. Bloch	.....	2,179	..	..	1	7/1	25.00
Macon County Tuberculosis Sanatorium [1]	Decatur, Ill.	D. F. Loewen	174	5,728	16	14	1	1/1	250.00
Pleasant View Sanatorium	East St. Louis, Ill.	W. S. Broker	208	9,126	44	..	1	.....	.....
Peoria Municipal Tuberculosis Sanatorium [1]	Peoria, Ill.		165	3,635	19	10	1	7/1	175.00
Rockford Municipal Tuberculosis Sanatorium [1]	Rockford, Ill.	W. J. Bryan	230	6,374	22	7	1	.....	250.00
Lake County Tuberculosis Sanatorium	Waukegan, Ill.	C. K. Petter	232	4,869	19	8	1	1, 7	.....
Boehne Tuberculosis Hospital	Evansville, Ind.	P. D. Crimm	448	835	55	55	1	Varies	350.00
Indianapolis General Hospital*	Indianapolis	D. J. White	197	2,867	42	2	1	7/1	100.00
Sunnyside Sanatorium	Indianapolis	F. L. Jennings	363	1,508	36	11	2	.....	250.00
Healthwin Hospital [1]	South Bend, Ind.	E. W. Custer	328	1,457	32	4	2	3/1	200.00
State Sanatorium [1]	Oakdale, Iowa		773	2,552	48	6	1	.....	100.00
†Waverly Hills Sanatorium [1]	Waverly Hills, Ky.	A. B. Mullen	681	0	121	14	4	7/1	90.00
†Charity Hospital of Louisiana*[1]	New Orleans, La.		839	9,846	144	8	4	7/1	25.00
Western Maine Sanatorium [1]	Greenwood Mt., Maine	L. Adams	152	797	22	5	1	.....	.....
Baltimore City Hospitals*[1]	Baltimore	H. Y. Langehuttig	567	.....	122	56	8	7/1	15.00
Boston Sanatorium	Boston	J. A. Foley	1,015	.....	124	..	8	.....	.....
Rutland State Sanatorium [1]	Rutland, Mass.		.....	.....	..	..	1	.....	.....
Norfolk County Hospital	S. Braintree, Mass.	N. R. Pillsbury	189	4,193	16	4	2	7	255.00
Middlesex County Sanatorium [1]	Waltham, Mass.		524	20,726	47	19	2	7	250.00
Westfield State Sanatorium [1]	Westfield, Mass.	W. Knowlton	.....	4,466	34	3	4	7/1	270.00
Belmont Hospital	Worcester, Mass.	H. K. Spangler	256	5,336	34	8	2	1/1, 7/1	155.00
University Hospital*[1]	Ann Arbor, Mich.	C. C. Sturgis	(Included in Medicine)				2	7/1	111.80
American Legion Hospital	Battle Creek, Mich.		253	226	59	1	1	1	360.00
Herman Kiefer Hospital [1]	Detroit	P. T. Chapman	1,807	49,503	235	100	15	7/1	368.00
Michigan State Sanatorium [1]	Howell, Mich.	E. W. Laboe	702	2,629	45	0	4	Varies	480.00
Ingham Sanatorium	Lansing, Mich.		444	18,622	25	..	3	7	300.00
Morgan Heights Sanatorium [1]	Marquette, Mich.	J. R. Acocks	164	2,812	18	4	1	Varies	300.00
William H. Maybury Sanatorium [1]	Northville, Mich.	W. L. Howard	1,500	.....	..	..	7	1/1	368.00
Oakland County Tuberculosis Sanatorium	Pontiac, Mich.		483	4,490	35	9	4	.....	300.00
Nopeming Sanatorium [1]	Nopeming, Minn.	G. A. Hedberg	.....	.....	..	..	2	.....	.....
Glen Lake Sanatorium	Oak Terrace, Minn.		993	32,949	102	40	2	.....	125.00
Mississippi State Tuberculosis Sanatorium	Sanatorium, Miss.	H. Boswell	711	1,967	33	2	1	7/1	175.00
Kansas City Municipal Tuberculosis Hospital	Kansas City, Mo.	G. K. Landis	.....	.....	..	..	2	.....	.....
Robert Koch Hospital [1]	Koch, Mo.	G. D. Kettelkamp	844	0	122	50	9	.....	.....
Homer G. Phillips Hospital*[1]	St. Louis	A. Goldman	248	1	60	16	1	7/1	95.00
Mount St. Rose Sanatorium	St. Louis	J. A. Smith	.....	.....	..	..	1	.....	.....
New Jersey Sanatorium for Tuberculous Diseases [1]	Glen Gardner, N. J.	J. A. Smith	505	2,066	18	5	7	.....	.....
Berthold S. Pollak Hospital for Chest Diseases	Jersey City, N. J.	G. O'Hanlon	858	33,291	201	48	8	.....	.....
†Bergen Pines, Bergen County Hospital [1]	Ridgewood, N. J.	R. R. Little	719	8,800	65	10	..	.....	200.00
Essex County Sanatorium [1]	Verona, N. J.	A. M. Hicks	685	1,967	173	27	6	Varies	200.00
Albany Hospital*[1]	Albany, N. Y.	R. J. Erickson	271	1,625	45	25	1	7/1	41.67

Numerical and other references will be found on page 225.

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23. PULMONARY DISEASES—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [6]	Beginning of Service (1949)	Beginning Stipend (Month)
Montefiore Hospital Country Sanatorium	Bedford Hills, N. Y.	S. Rothbard	.....	.....	..	..	4	.....	$100.00
Kings County Hospital[a1]	Brooklyn	C. Hamilton	856	6,150	201	17	4	1/1, 7/1	130.00
Kingston Avenue Hospital	Brooklyn	F. Murray	422	.....	54	14	3	7/1	130.00
Edward J. Meyer Memorial Hospital[a1]	Buffalo	H. G. Dayman	780	1,103	185	76	1	7/1	100.00
Nassau County Tuberculosis Hospital [1]	Farmingdale, N. Y.	J. C. Walsh	548	9,562	69	10	2	.....	.....
Herman M. Biggs Memorial Hospital [1]	Ithaca, N. Y.	N. S. Lincoln	415	7,945	28	7	5	.....	.....
Triboro Hospital [1]	Jamaica, N. Y.	R. H. Bennett	.....	.....	158	68	14	.....	80.00
†Niagara Sanatorium [1]	Lockport, N. Y.	A. N. Aitken	340	9,790	42	33	2	.....	283.00
Mount Morris Tuberculosis Hospital [1]	Mount Morris, N. Y.	A. M. Stokes	333	7,262	33	16	4	.....	.....
Bellevue Hospital, Div. I—Columbia University*	New York City	J. B. Amberson	2,779	8,851	363	74	22	.....	65.00
Lenox Hill Hospital[a1]	New York City	G. Thorburn	84	.....	1	..	1	1/1	50.00
Metropolitan Hospital[a1]	New York City	G. G. Ornstein	818	5,600	193	25	5	7/1	130.00
Montefiore Hospital for Chronic Diseases[a1]	New York City	S. Rothbard	325	.....	35	18	3	.....	.....
†Morrisania City Hospital	New York City	.....	.....	.....	..	..	..	.....	.....
St. Joseph Hospital for Chest Diseases	New York City	F. J. McCarthy	741	.....	64	15	4	.....	175.00
Homer Folks Tuberculosis Hospital [1]	Oneonta, N. Y.	R. Horton	427	7,319	48	16	2	.....	342.50
Municipal Sanatorium [1]	Otisville, N. Y.	J. S. Edlin	1,106	.....	..	..	7	.....	.....
Ray Brook State Tuberculosis Hospital [1]	Ray Brook, N. Y.	.....	617	5,875	24	15	4	.....	.....
Iola-Monroe County Tuberculosis Sanatorium [1]	Rochester, N. Y.	.....	637	18,969	93	48	6	7	247.91
Schenectady County Tuberculosis Hospital [1]	Schenectady, N. Y.	J. M. Blake	225	3,317	17	5	2	7/1	100.00
Sea View Hospital [1]	Staten Island, N. Y.	G. G. Ornstein	3,046	.....	436	..	23	.....	130.00
Trudeau Sanatorium [1]	Trudeau, N. Y.	E. N. Packard	370	.....	3	2	3	Varies	50.00
Grasslands Hospital[a1]	Valhalla, N. Y.	W. G. Childress	483	1,702	62	35	8	7	125.00
Jefferson County Sanatorium [1]	Watertown, N. Y.	S. E. Simpson	92	2,947	7	4	1	.....	150.00
†North Carolina Sanatorium for the Treatment of Tuberculosis	McCain, N. C.	J. S. Hiatt, Jr.	1,175	2,472	136	19	..	.....	.....
Dunham Hospital	Cincinnati	.....	928	976	134	50	6	.....	.....
City Hospital[a1]	Cleveland	R. C. McKay	533	742	198	81	2	7/1	100.00
Franklin County Tuberculosis Hospital [1]	Columbus, Ohio	W. L. Potts	521	518	64	13	5	Varies	375.00
Sunny Acres, Cuyahoga County Tuberculosis Hospital	Warrensville, Ohio	.....	.....	.....	..	..	6	.....	.....
†Mahoning Tuberculosis Sanatorium [1]	Youngstown, Ohio	W. Newcomer	.....	.....	..	..	3	7	250.00
Eagleville Sanatorium for Consumptives [1]	Eagleville, Pa.	A. J. Cohen	339	8,121	17	4	2	.....	.....
†Hamburg State Sanatorium	Hamburg, Pa.	.....	.....	.....	..	..	..	.....	.....
Germantown Dispensary and Hospital*	Philadelphia	F. M. McPhedran	.....	.....	..	..	1	7	50.00
Jefferson Medical College Hospital*	Philadelphia	.....	.....	.....	..	..	2	7/1	.....
†Philadelphia General Hospital[a1]	Philadelphia	.....	1,445	.....	446	..	3	7/1	70.00
†City Tuberculosis Hospital	Pittsburgh	G. E. Martin	923	1,782	129	19	3	.....	246.25
†Tuberculosis League Hospital [1]	Pittsburgh	C. H. Marcy	360	17,650	28	8	3	7/1	200.00
State Sanatorium [1]	Wallum Lake, R. I.	U. E. Zambarano	639	3,582	78	16	8	.....	.....
Pine Breeze Sanatorium	Chattanooga, Tenn.	.....	.....	.....	..	..	1	.....	.....
Davidson County Tuberculosis Hospital	Nashville, Tenn.	.....	430	.....	..	..	2	1/1, 7/1	200.00
†Oakville Memorial Sanatorium [1]	Oakville, Tenn.	F. H. Alley	976	.....	113	29	1	1, 7	150.00
†Woodlawn Hospital	Dallas, Texas	.....	.....	.....	..	..	1	.....	.....
Woodmen of the World Memorial Hospital	San Antonio, Texas	.....	252	.....	15	4	1	1/1	.....
†Firland Sanatorium [1]	Seattle	R. Davies	760	.....	76	25	2	1/1, 7/1	150.00
Hopemont Sanitarium [1]	Hopemont, W. Va.	.....	356	.....	..	..	4	.....	200.00
Muirdale Sanatorium [1]	Milwaukee	A. V. Cadden	.....	.....	..	..	1	Varies	.....
Wisconsin State Sanatorium	Statesan, Wis.	R. H. Schmidt, Jr.	244	.....	6	5	2	.....	250.00
†Leahi Hospital [1]	Honolulu, Hawaii	.....	.....	.....	..	..	9	Varies	220.00

24. RADIOLOGY

The following services are approved by the Council and the American Board of Radiology. Prior to July 1, 1950, these services will be reviewed in collaboration with the American Board of Radiology to determine whether approval will be continued beyond that date and to determine further the number of years of training in individual hospitals which the Board will continue to accept as preparation for its certification examination.

Hospitals, 359; Assistant Residencies and Residencies, 897

Name of Hospital	Location	Chief of Service	Type of Training [12]	Roentgenographic Examinations	X-Ray Treatments	Radium Treatments	Asst. Res. and Residencies Offered [6]	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
United States Army										
†Army and Navy General Hospital	Hot Springs National Park, Arkansas	H. C. Harrell	Rad.	.....	.....	...	2	.....	1	n
Letterman General Hospital*	San Francisco	E. A. Lodmell	Rad.	58,622	6,442	36	5	.....	2	n
†Fitzsimons General Hospital*	Denver	D. S. Kellogg	Roent.	58,902	5,154	202	6	.....	1	n
Walter Reed General Hospital*	Washington, D. C.	H. I. Amory	Rad.	60,040	17,619	710	3	1, 7	3	n
†Oliver General Hospital*	Augusta, Ga.	A. B. Ramsey	D.R.	30,949	1,797	0	3	1/1, 7/1	1	n
†Brooke General Hospital*	San Antonio, Texas	A. J. Ackerman	Roent.	63,679	2,088	44	3	.....	1	n
Tripler General Hospital*	Moanalua, T. H.	P. A. Paden	Rad.	26,604	455	6	..	7/1	3	n
United States Navy										
†U. S. Naval Hospital*	Long Beach, Calif.	C. Gartenlaub	Roent.	24,556	3,603	115	1	Varies	1	n
†U. S. Naval Hospital*	Oakland, Calif.	K. H. Vinnedge	Roent.	.....	.....	...	2	.....	1	n
†U. S. Naval Hospital*	San Diego, Calif.	E. Douthat	Rad.	62,744	5,304	176	2	.....	3	n
†U. S. Naval Hospital*	Great Lakes, Ill.	J. P. Wood	Roent.	16,078	718	0	2	Varies	1	n
†U. S. Naval Hospital*	Bethesda, Md.	M. W. Mason	Roent.	19,602	1,637	63	1	.....	1	n
†U. S. Naval Hospital*	Chelsea, Mass.	G. F. Fraser	Roent.	20,276	3,021	5	1	.....	1	n
U. S. Naval Hospital*	St. Albans, N. Y.	N. M. Hardisty	Roent.	17,172	1,080	236	2	.....	2	n
†U. S. Naval Hospital*	Philadelphia	A. H. Staderman	Roent.	29,971	2,940	...	2	.....	1	n
United States Public Health Service										
U. S. Marine Hospital[a1]	New Orleans	A. Mayoral	Rad.	17,199	229	...	1	7/1	1	n
†U. S. Marine Hospital[a1]	Baltimore	J. E. Wirth	Ther.Rad.	9,138	6,498	82	2	7/1	1	n
†U. S. Marine Hospital[a1]	Stapleton, S. I., N. Y.	W. M. Sennott	Roent.	38,064	1,653	...	3	7/1	1	n
Veterans Administration										
Veterans Administration Center [1]	Los Angeles, Calif.	B. Hatz	Rad.	48,802	19,783	234	6	.....	3	n
†Veterans Administration Hospital [1]	San Francisco	W. W. Saunders	D.R.	17,051	400	3	2	7/1	1	n

Numerical and other references will be found on page 225.

24. RADIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Type of Training [12]	Roentgenographic Examinations	X-Ray Treatments	Radium Treatments	Asst., Res. and Interns Offered [4]	Beginning of Service (1949)	Length of Major Program (Years)	Beginning Stipend (Month)
†Veterans Adm'n. Hospital [1]	Van Nuys, Calif.	E. P. Bugbee	D.R.	38,378	113	18	4	1/1, 7/1	1	n
†Veterans Adm n. Hospital [1]	Fort Logan, Colo.	L. F. Ingersoll	D.R.	11,835	0	0	4	1	1	n
†Veterans Admin. Hospital	Newington, Conn.	A. G. Ansprenger	Rad.	11,526	0	0	..	7/1	1	n
†Veterans Admin. Hospital	Washington, D. C.	S. R. Bersack	Rad.	11,578	2,038	20	3	7/1	2	n
†Veterans Admin. Hospital	Chamblee, Ga.	C. A. Priviteri	Roent.	15,969	8,274	0	3	7/1	1	n
Veterans Admin. Hospital	Hines, Ill.	F. L. Hussey	Rad.	74,043	23,195	270	8	1/2, 7/1	3	n
†Veterans Admin. Hospital [1]	Indianapolis	R. T. Levin	D.R.	10,181	0	1	4	1, 7	1	n
Veterans Admin. Center	Des Moines, Iowa	C. A. Voelker	Rad.	34,079	.....	...	1	7	1	n
†Veterans Admin. Center [1]	Wadsworth, Kan.	A. Wolkin	D.R.	40,500	1,984	11	4	1, 7	1	n
†Veterans Admin. Hospital [1]	Louisville, Ky.	D. Shapiro	D.R.	28,006	2,953	17	3	.....	1	n
†Veterans Admin. Hospital [1]	New Orleans, La.	L. Raider	D.R.	17,025	2,822	0	1	.....	1	n
†Veterans Admin. Hospital	Fort Howard, Md.	J. T. Brackin, Jr.	D.R.	11,213	0	0	2	Varies	1	n
†Veterans Admin. Hospital [1] (West Roxbury)	Boston	E. G. Wissing	D.R.	17,903	38	0	2	;	1	n
Veterans Admin. Hospital	Framingham, Mass.		Rad.						1	n
†Veterans Admin. Hospital	Dearborn, Mich.	P. H. Schraer	D.R.	23,728	2,379		2	7/1	1	n
†Veterans Admin. Hospital	Minneapolis, Minn.	B. J. O'Loughlin	D.R.	48,850	2,575	0	4	.....	1	n
Veterans Admin. Hosp tal [1]	Jefferson Bks., Mo.		Rad.	19,912	4,200	240	4	.....	1	n
†Veterans Admin. Hospital	New York City	A. Sheinmel	Roent.	55,702	14,629	47	6	7	1	n
†Veterans Admin. Hosp.tal [1]	Cleveland	M. D. Sachs	D.R.	35,192	720	...	4	.....	1	n
†Veterans Admin. Hospital [1]	Oklahoma City, Okla.	J. R. Danstrom	D.R.	7,741	882	7	..	.....	1	n
†Veterans Admin. Hospital	Portland, Ore.	M. D. Hyman	Roent.	18,541	3,523	4	1	1/1, 7/1	1	n
†Veterans Admin. Hospital	Aspinwall, Pa.	G. H. Alexander	D.R.	22,106	.....	...	4	7/1	1	n
†Veterans Admin. Hospital	Memphis, Tenn.	W. H. Mendel	D.R.	35,557	2,580	22	4	7/1	1	n
†Veterans Admin. Hospital	Nashville, Tenn.	K. E. Diebert	D.R.	32,504	1,370	22	2	7/1	1	n
†Veterans Admin. Hospital [1]	Houston, Tex.	J. Hazamm	Rad.	12,336	1,342	16	3	1/1, 7/1	1	n
†Veterans Admin. Hospital [1]	McKinney, Texas	B. K. Lovell	D.R.	23,502	3,574	20	2	.....	1	n
†Veterans Admin. Hospital	Temple, Texas	I. J. Zimmerman	D.R.	14,129	.....	...	1	.....	1	n
†Veterans Admin. Hospital	Salt Lake City	H. H. Plenk	D.R.	10,330	.....	...	2	7	1	n
†Veterans Admin. Center [1]	Milwaukee, Wis.	T. J. Pfeffer	D.R.	30,380	599	...	3	.....	1	n
Nonfederal										
†Carraway Methodist Hospital*	Birmingham, Ala.	L. E. Sorrell	Roent.	6,843	2,954	281	1	.....	1	.....
†Jefferson-Hillman Hospital*[1]	Birmingham, Ala.	N. B. Carter	Rad.	18,535	15,908	104	4	.....	1	.....
†St. Monica's Hospital and Health Center*[1]	Phoenix, Ariz.	J. Foster	Rad.	8,459	1,837	17	1	7/1	1	$200.00
†Tucson Medical Center*[1]	Tucson, Ariz.	A. J. Present	Rad.	3,436	375	15	1	7/1	1	200.00
University Hospital*[1]	Little Rock, Ark.	H. C. Chenault	Roent.	14,189	6,408	84	5	7/1	3	.....
†San Joaquin General Hospital*[1]	French Camp, Calif.	W Brock	Roent.	10,485	2,324	97	1	.....	1	.....
Fresno County General Hospital*	Fresno, Calif.	C. L. Oukes	Rad.	7,753	2,133	17	..	.....	1	
Seaside Memorial Hospital*[1]	Long Beach, Calif.	H. J. Prichard	Rad.	10,922	.....	6,009	1	7	1	150.00
†Cedars of Lebanon Hospital*[1]	Los Angeles	H. L. Jaffe and E. Freedman	Rad.	15,608	4,841	39	2	.....	1	50.00
†Hospital of the Good Samaritan*[1]	Los Angeles	R. T. Taylor and R. B. Weathered	Rad.	17,072	4,988		1	.....	1	.....
Los Angeles County Hospital*[1]	Los Angeles	R. A. Carter	Rad.	82,290	10,121	366	7	Varies	3	165.00
†Queen of Angels Hospital*	Los Angeles	L. S. Goin	Rad.	9,263	3,711	59	1	.....	1	.....
St. Vincent's Hospital*	Los Angeles	K. S. Davis	Rad.	8,696	1,782	30	1	7/1	3	.....
White Memorial Hospital*	Los Angeles	W. L. Stillson	Rad.	11,474	6,946	453	3	7/1	3	140.00
Highland-Alameda County Hospital*[1]	Oakland, Calif.	H. H. Jensen	Rad.	9,864	1,856	45	1	.....	3	100.00
†Permanente Foundation Hospital*[1]	Oakland, Calif.	M. Abel	Rad.	20,330	2,869	15	1	.....	1	.....
†Palo Alto Hospital	Palo Alto, Calif.	R. Powers	D.R.	.....	.....	...	1	.....	1	.....
Collis P. and Howard Huntington Memorial Hospital*	Pasadena, Calif.	J. H. Chapman and R. S. Harrison	Roent.	8,900	2,375	...	1	7/1	2	.....
†Children's Hospital*[1]	San Francisco	G. King	Rad.	5,781	1,861	70	1	7/1	1	50.00
†Franklin Hospital*[1]	San Francisco	A. J. Williams	Roent.	10,384	3,564	5	2	.....	1	100.00
Mount Zion Hospital*	San Francisco	J. Levitin	Roent.	5,370	643	8	1	.....	1	50.00
†St. Mary's Hospital*	San Francisco	C. A. Capp	Roent.	9,941	2,971	...	1	.....	..	.....
San Francisco Hospital*[1]	San Francisco	A. J. Williams and H. Garland	Rad.	71,722	3,348	43	4	.....	2	175.00
Stanford University Hospital*[1]	San Francisco	H. S. Kaplan	Rad.	15,568	6,315	160	5	7/1	2	50.00
University of California Hospital*[1]	San Francisco	R. S. Stone	Rad.	24,185	14,612	60	4	7/1, 8/1, 9/1	3	50.00
†Santa Clara County Hospital*	San Jose, Calif.	T. N. Foster and J. vons Saltza	Roent.	5,958	246	12	1	.....	1	.....
†Santa Barbara Cottage Hospital*	Santa Barbara, Calif.	M. J. Geyman and R. Gates	D.R.	6,063	4,325	37	1	.....	..	
†St. John's Hospital*	Santa Monica, Calif.	C. J. Conti, Jr.	Rad.	.....	.....	...	1	7	..	150.00
St. Francis Hospital and Sanatorium	Colorado Spgs., Colo.	V. L. Bolton	D.R.	.....	.....	...	..	.....	1	.....
†Presbyterian Hospital*	Denver	K. D. A. Allen	Rad.	.....	.....	...	1	.....	3	.....
†St. Luke's Hospital*	Denver	W. P. Stampfli	Rad.	6,411	1,721	4	1	1/1	1	50.00
University of Colorado Medical Center Colorado General Hospital*[1]	Denver	M. H. Levine	Rad.	2,318	2,387	33	2	7/1	3	75.00
Denver General Hospital	Denver	J. H. Weiss	Rad.	19,704	882	...	..	.....	1	75.00
Corwin Hospital*[1]	Pueblo, Colo.	G. A. Unfug	Roent.	8,443	1,428	0	1	7/1	2	75.00
†Bridgeport Hospital*	Bridgeport, Conn.	B. M. Parmelee	Rad.	6,982	1,573	191	1	7/1	1	100.00
Hartford Hospital*[1]	Hartford, Conn.	D. J. Roberts	Rad.	20,732	10,013	...	3	7/1	3	50.00
Grace-New Haven Community Hospital Grace Unit*	New Haven, Conn.	R. M. Lowman	Rad.	8,146	4,516	...	1	7/1	1	50.00
New Haven Unit (University Service)*[1]	New Haven, Conn.	H. M. Wilson	Rad.	25,049	5,252	44	6	7/1	3	40.00
†Hospital of St. Raphael*	New Haven, Conn.	R. Shapiro	Roent.	.....	.....	...	2	.....	1	.....
†Waterbury Hospital*[1]	Waterbury, Conn.	J. L. Harvey	Rad.	9,081	1,295	...	1	7/1	1	100.00
†Delaware Hospital*	Wilmington, Del.	W. W. Lattomus	D.R.	30,922	2,815	87	1	7/1	2	110.00
Central Dispensary and Emergency Hospital*[1]	Washington, D. C.	J. Wissler	Rad.	11,700	3,900	80	..	7/1	3	50.00
Doctors Hospital*	Washington, D. C.	R. C. Christie	Rad.	25,651	10,527	211	7	.....	3	.....
†Gallinger Municipal Hospital*[1]	Washington, D. C.	H. R. Reed	Rad.	27,877	1,139	23	3	7/1	1	.....
Garfield Memorial Hospital*	Washington, D. C.	A. Hampton	Rad.	.....	.....	5	..	.....	2	.....
Georgetown University Hospital*	Washington, D. C.	M. M. Copeland	Rad.	11,339	3,800	38	5	.....	2	.....
George Washington University Hospital*[1]	Washington, D. C.	W. W. Stanbro	Rad.	4,486	1,015	10	3	7/1	1	50.00
Sibley Memorial Hospital*[1]	Washington, D. C.	W. M. Clopton	Rad.	9,777	1,936	54	2	7/1	3	100.00
James M. Jackson Memorial Hospital*[1]	Miami, Fla.	M. M. Greenfield	Rad.	10,906	6,861	20	0	7/1	2	.....
Grady Memorial Hospital*[1]	Atlanta, Ga.	A. V. Halbum	Rad.	31,386	8,279	167	4	7/1	3	.....
Piedmont Hospital*[1]	Atlanta, Ga.	G. Hrdlicka	Rad.	4,808	895	0	1	7/1	3	75.00
†University Hospital*	Augusta, Ga.	L. P. Holmes	Rad.	41,348	4,585	2	1	.....	3	.....
†Emory University Hospital*	Emory University, Ga.	T. F. Leigh	Rad.	9,181	6,410	161	4	7/1	1	50.00
†Alexian Brothers' Hospital*	Chicago	M. Indovina	Roent.	11,564	1,969	...	1	7/1	1	100.00
Augustana Hospital*	Chicago	D. S. Bellin	Rad.	8,992	9,442	0	2	11/1	3	50.00
Cook County Hospital*[1]	Chicago	G. Landau	Rad.	84,624	21,774	134	7	.....	3	.....
†Edgewater Hospital*	Chicago	N. S. Zeitlin	Roent.	10,366	1,806	1	1	.....	1	150.00

Numerical and other references will be found on page 225.

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24. RADIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Type of Training [12]	Roentgenographic Examinations	X-Ray Treatments	Radium Treatments	Asst., Res. and Residencies Offered	Beginning of Service (1948)	Length of Approved Program (Years)	Beginning Stipend (Month)
†Illinois Masonic Hospital*[1]	Chicago	J. H. Gilmore	Rad.	10,177	397	7	1	.....	1	.....
†Lutheran Deaconess Home and Hospital*[1]	Chicago	F. L. Hussey	Roent.	11,985	1,312	4	1	.....	1	.....
†Mercy Hospital—Loyola University Clinics*	Chicago	W. Furey	Rad.	14,119	11,849	257	3	.....	1	$ 25.00
Michael Reese Hospital*[1]	Chicago	R. A. Arens	Rad.	48,241	16,420	3,145	3	.....	3	50.00
Mount Sinai Hospital*[1]	Chicago	J. Arendt	Roent.	10,905	2,744	...	2	7/1	2	75.00
Passavant Memorial Hospital*	Chicago	R. B. Lewis	Rad.	6,875	798	25	3	.....	3	.....
Presbyterian Hospital*	Chicago	F. H. Squire	Rad.	28,930	6,706	148	3	.....	3	25.00
Provident Hospital*[1]	Chicago	W. P. Quinn	Rad.	5,359	2,414	29	3	.....	2	.....
†Ravenswood Hospital*[1]	Chicago	D. L. Jenkinson	Rad.	9,202	1,953	...	2	2/1	1	60.00
Research and Educational Hospitals*[1]	Chicago	R. A. Harvey	Roent.	28,202	12,937	2,294	6	7/1	3	55.00
†St. Bernard's Hospital*	Chicago	B. C. Cushway	Rad.	.....	.....	...	1	.....	1	.....
†St. Joseph Hospital*	Chicago	W. E. Anspach	Roent.	6,470	1,081	0	1	.....	1	.....
St. Luke's Hospital*	Chicago	E. L. Jenkinson	Rad.	31,100	7,791	27	6	.....	3	.....
University of Chicago Clinics*[1]	Chicago	P. C. Hodges	Rad.	24,342	5,042	175	7	7/1	3	25.00
Wesley Memorial Hospital*[1]	Chicago	E. E. Barth	Rad.	25,348	2,066	..	4	.....	2	25.00
†Woodlawn Hospital*[1]	Chicago	H. A. Olin	Roent.	4,238	1,263	11	1	.....	1	.....
Evanston Hospital*[1]	Evanston, Ill.	R. G. Willy	Rad.	20,821	2,278	...	3	.....	3	50.00
†St. Francis Hospital*	Evanston, Ill.	A. C. Ledoux	Rad.	18,781	1,655	35	1	7	1	75.00
†Little Company of Mary Hospital*	Evergreen Park, Ill.	W. W. Furey	D.R.	15,171	2,216	49	1	.....	1	.....
†Ryburn Memorial Hospital [13]	Ottawa, Ill.	R. J. Bailey	Ther Rad.	.....	.....	...	1	.....	1	.....
†Methodist Hospital of Central Illinois*	Peoria, Ill.	F. H. Decker	Rad.	8,361	2,938	116	1	7/1	1	150.00
St. Francis Hospital*[1]	Peoria, Ill.	P. R. Dirkse	Rad.	12,751	3,979	10	1	7	2	150.00
†Clinic Hospital [1]	Bluffton, Ind.	W. S. Tirman	Rad.	15,462	5,040	23	1	.....	1	.....
†St. Mary's Mercy Hospital*	Gary, Ind.	C. P. Galanti	Roent.	.....	.....	...	1	.....	1	.....
St. Margaret Hospital*	Hammond, Ind.	C. W. Rauschenbach	Roent.	6,636	979	14	3	4/1	2	200.00
Indianapolis General Hospital*	Indianapolis	L. J. Smith	Rad.	19,707	6,742	64	3	7/1	3	100.00
Indiana University Medical Center*[1]	Indianapolis	J. A. Campbell	Rad.	24,116	13,091	389	5	.....	3	.....
Methodist Hospital*[1]	Indianapolis	H. C. Oehsner	Rad.	22,534	6,698	43	1	7/1	3	200.00
†St. Elizabeth Hospital*	La Fayette, Ind.	R. W. Currie	Rad.	.....	.....	...	1	10/1	1	100.00
†Ball Memorial Hospital*	Muncie, Ind.	B. W. Stocking	Roent.	9,518	2,645	24	1	7/1	1	100.00
Iowa Methodist Hospital*	Des Moines, Iowa	T. A. Buchanan	Rad.	7,426	440	21	1	.....	3	.....
University Hospitals*[1]	Iowa City	H. D. Kerr	Rad.	41,082	18,162	21	10	7/1	3	50.00
University of Kansas Medical Center*	Kansas City, Kan.	G. Tice	Rad.	3,969	9,410	229	2	.....	3	.....
†Louisville General Hospital*	Louisville, Ky.	E. L. Pirkey	Rad.	22,702	3,094	25	3	7/1	1	45.00
†St. Joseph Infirmary*	Louisville, Ky.	S. E. Thomason	Rad.	11,439	7,172	109	2	.....	1	75.00
Baptist Hospital*	Alexandria, La.	H. O. Barker	Rad.	.....	.....	...	1	.....	1	.....
Charity Hospital of Louisiana*[1]	New Orleans	L. Menville	Rad.	94,826	63,955	466	10	7/1	3	25.00
†Oehsner Foundation Hospital [1,11]	New Orleans	E. H. Little	Rad.	39,118	2,337	...	3	1/1	1	150.00
Southern Baptist Hospital*[1]	New Orleans	L. Bristow	Rad.	12,789	4,504	...	3	7/1	3	150.00
Touro Infirmary*	New Orleans	E. Schmidt	Roent.	18,029	4,414	...	2	.....	3	25.00
Shreveport Charity Hospital*	Shreveport, La.	M. L. Cooke	Rad.	11,840	7,912	80	2	.....	3	.....
†Baltimore City Hospitals*[1]	Baltimore	S. H. Macht	Rad.	17,912	1,294	10	3	7/1	1	15.00
Johns Hopkins Hospital*[2]	Baltimore	R. H. Morgan	Rad.	18,773	9,129	200	3	7/1	3	41.66
Sinai Hospital*[1]	Baltimore	H. A. Miller	Roent.	11,276	2,332	...	1	7/1	1	25.00
†Union Memorial Hospital*	Baltimore	E. N. Broyles	Rad.	10,244	0	0	1	.....	1	.....
University Hospital*[1]	Baltimore	W. L. Kilby	Rad.	29,005	5,506	257	4	7/1	2	.....
Beth Israel Hospital*[1]	Boston	S. A. Robins	Rad.	14,936	1,910	12	3	4/1	2	41.66
Boston City Hospital*[1]	Boston	M. Ritvo	Rad.	65,819	3,859	55	4	.....	3	.....
Children's Hospital*[1]	Boston	T. Lanman	Roent.	21,131	1,881	...	1	Varies	3	.....
Lahey Clinic	Boston	.....	Rad.	.....	.....	...	3	.....	3	.....
Massachusetts General Hospital*	Boston	L. L. Robbins	Rad.	11,154	1,909	51	4	1/1, 4/1	3	.....
Massachusetts Memorial Hospitals*[1]	Boston	G. Levene	Roent.	25,146	1,808	...	2	7/1	1	83.33
New England Center Hospital [1]	Boston	A. Ettinger	Rad.	.....	.....	...	3	.....	3	.....
New England Deaconess Hospital	Boston	J. A. Marks	Rad.	12,168	5,043	137	1	.....	3	.....
Peter Bent Brigham Hospital*	Boston	M. C. Sosman	Rad.	37,615	2,613	...	3	3	3	.....
†St. Elizabeth's Hospital*	Boston	W. S. Carey	Roent.	5,588	0	6	1	.....	..	.....
†Mount Auburn Hospital*[1]	Cambridge, Mass.	R. Schatzki	D.R.	11,886	0	0	1	4/1	1	100.00
†Lawrence General Hospital*[1]	Lawrence, Mass.	W. C. Miller	Rad.	.....	.....	...	1	.....	1	.....
Newton-Wellesley Hospitals*[1]	Newton, Mass.	C. Holmes	Roent.	10,279	1,243	...	2	7/1	2	100.00
†Quincy City Hospital*	Quincy, Mass.	W. S. Altman	Roent.	9,543	8,457	8	1	.....	1	125.00
Salem Hospital*	Salem, Mass.	S. A. Wilson	Rad.	9,387	1,604	20	4	.....	3	50.00
†Westfield State Sanatorium	Westfield, Mass.	J. W. Turner	Rad.	10,812	5,956	56	1	7/1	1	.....
†Memorial Hospitals*[1]	Worcester, Mass.	W. J. Elliott	Rad.	13,112	2,340	12	1	.....	..	100.00
St. Joseph Mercy Hospital*	Ann Arbor, Mich.	S. W. Donaldson	Rad.	15,309	2,541	36	4	7/1	3	110.00
University Hospitals*[1]	Ann Arbor, Mich.	F. J. Hodges	Rad.	43,314	14,115	353	8	7/1	3	111.80
City of Detroit Receiving Hospital*[1]	Detroit	.....	Roent.	31,893	0	0	2	.....	2	.....
Grace Hospital*	Detroit	H. A. Jarre	Rad.	20,718	6,853	17	3	7/1	3	75.00
Harper Hospitals*[1]	Detroit	L. Reynolds	Rad.	25,767	20,686	492	10	7/1	3	.....
Henry Ford Hospital*[1]	Detroit	H. P. Doub	Rad.	47,096	6,863	275	4	.....	3	.....
†Herman Kiefer Hospital [1]	Detroit	C. C. Birkelo	Roent.	40,399	183	4,495	1	7/1	1	332.00
Mount Carmel Mercy Hospital*[1]	Detroit	J. M. Grace	D.R.	15,109	3,149	24	1	7/1	1	150.00
Providence Hospital*	Detroit	N. A. Irwin	Rad.	17,721	7,390	275	2	7/1	3	140.00
St. Mary's Hospital*	Detroit	J. E. Lofstrom	Rad.	14,486	5,124	44	1	.....	3	.....
†Wayne County General Hospital and Infirmary*[1]	Eloise, Mich.	N. R. Shippey	Rad.	25,611	5,064	46	2	7/1	1	235.00
Hurley Hospital*	Flint, Mich.	D. R. Limbach	Roent.	20,169	4,004	161	1	.....	3	.....
†Butterworth Hospital*[1]	Grand Rapids, Mich.	R. J. McCandliss	Rad.	14,351	3,040	62	2	7/1	1	100.00
†Hackley Hospital	Muskegon, Mich.	L. E. Holly	Roent.	.....	.....	...	1	.....	1	.....
†St. Luke's Hospital*	Duluth, Minn.	A. L. Abrahamson	Rad.	.....	.....	...	..	.....	1	.....
St. Mary's Hospital*	Duluth, Minn.	J. R. McNutt	Rad.	7,811	3,078	38	1	.....	1	.....
†Northwestern Hospital*	Minneapolis	C. Hansen	Roent.	.....	.....	...	1	10/1	1	150.00
†Swedish Hospital*	Minneapolis	T. T. Nordlin	Rad.	17,450	4,762	96	1	.....	3	.....
University of Minnesota Hospitals*[1]	Minneapolis	L. G. Rigler	Rad.	30,355	11,317	669	11	.....	3	.....
Mayo Foundation	Rochester, Minn.	B. R. Kirklin	Rad.	.....	.....	...	15	.....	3	92.50
†St. Louis County Hospital*	Clayton, Mo.	E. W. Spinzig	Rad.	7,579	607	...	1	7/1	1	130.00
†Ellis Fischel State Cancer Hospital [1]	Columbia, Mo.	C. M. Waggoner	Rad.	4,403	16,221	...	6	7/1	1	100.00
†Kansas City General Hospital No. 1*	Kansas City, Mo.	Scarpellino	Rad.	.....	.....	...	1	.....	1	.....
		D. S. Dann	Rad.	10,055	2,465	77	3	7	1	50.00
†Menorah Hospital*[1]	Kansas City, Mo.	D. S. Dann	Rad.	4,053	2,389	47	1	.....	1	.....
Research Hospital*[1]	Kansas City, Mo.	R. H. Lockwood	Rad.	81,019	3,389	612	4	7/1	3	.....
St. Joseph Hospital*	Kansas City, Mo.	C. E. Virden	Rad.	13,239	5,607	172	1	.....	3	.....
†St. Luke's Hospital*[1]	Kansas City, Mo.	L. A. Scarpellino	Rad.	10,550	1,605	30	1	.....	1	.....
†St. Mary's Hospital*	Kansas City, Mo.	E. R. Dewease	Rad.	1,394	6,571	28	2	7/1	1	125.00
Barnes Hospital*	St. Louis	S. Moore	Rad.	46,115	15,235	249	9	7/1	3	25.00
Homer G. Phillips Hospital*[1]	St. Louis	W. E. Allen, Jr.	Rad.	18,644	1,248	47	1	7/1	3	95.00
†Jewish Hospital*[1]	St. Louis	P. O. Schnoetebeln	Rad.	.....	.....	...	1	7	3	50.00
St. Louis City Hospitals*[1]	St. Louis	D. O. Weir	Rad.	31,082	2,436	150	4	7/1	3	95.00
St. Luke's Hospital*	St. Louis	O. O. Zink	Rad.	7,529	1,088	130	1	7/1	3	50.00

Numerical and other references will be found on page 225.

24. RADIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Type of Training [12]	Roentgenographic Examinations	X-Ray Treatments	Radium Treatments	Asst., Res. and Resid. Jobs Offered [9]	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
St. Mary's Group of Hospitals*	St. Louis	L. Sante	Rad.	22,226	2,786	165	2	7/1	3	$ 35.00
Creighton Memorial St. Joseph's Hospital [a1]	Omaha	J. F. Kelly	Rad.	20,963	2,645	39	3	7/1	3	100.00
†Nebraska Methodist Hospital [a1]	Omaha	H. Hunt	Rad.	7,639	4,478	124	1	.....	1	125.00
University of Nebraska Hospital [a1]	Omaha	H. B. Hunt	Rad.	9,391	2,913	75	3		3	.....
†St. Mary's Hospital [1]	Reno, Nev	M. J. Thorpe	Roent.	.....	.....	...	1	.....	1	.....
Mary Hitchcock Memorial Hospital [a1]	Hanover, N. H	L. K. Sycamore	Rad.	15,436	4,865	130	2	7/1	2	150.00
†Atlantic City Hospital*	Atlantic City, N. J	C. B. Kaighn	Rad.	8,357	2,158	45	1	7/1	1	50.00
†Jersey City Hospital [a1]	Jersey City, N. J	H. J. Perlberg	Rad.	33,417	6,738	147	2	.....	1	.....
†Monmouth Memorial Hospital [a1]	Long Branch, N. J	W. G. Herrman	Rad.	4,670	229	...	1	.....	1	.....
Newark Beth Israel Hospital*	Newark, N. J	N. J. Furst	Rad.	6,819	4,290	1,575	1	7/1	1	100.00
†Newark City Hospital [a1]	Newark, N. J	P. Santora	Rad.	36,889	3,139	23	2	3, 6	1	.....
†Orange Memorial Hospital*	Orange, N. J	W. H. Seward	Rad.	12,186	8,379	37	1	7/1	1	100.00
†Newcomb Hospital	Vineland, N. J	J. G. Cohen	D.R.	.....	.....	...	1	.....	1	.....
†Albany Hospital [a1]	Albany, N. Y	W. P. Howard	Roent.	20,518	2,857	246	2	7/1	1	41.67
†Beth-El Hospital [a1]	Brooklyn	M. Dannenberg	Roent.	7,552	1,032	62	2	.....	1	.....
†Brooklyn Cancer Hospital	Brooklyn	S. W. Westing	Rad.	7,562	927	500	4	.....	1	.....
Brooklyn Hospital*	Brooklyn	J. Pepe	Rad.	24,356	1,961	...	2	7/1	2	25.00
Jewish Hospital*	Brooklyn	M. G. Wasch	Rad.	15,241	3,178	78	3	7	3	.....
Kings County Hospital [a1]	Brooklyn	B. Ehrenpreis	D.R. (Ther.Rad.)	91,068	17,939	271	4	1/1, 7/1	3	80.00
Long Island College Hospital [a1]	Brooklyn	A. L. L. Bell	Rad.	17,025	3,574	71	4	7/1	3	25.00
Maimonides Hospital [1]										
†Beth Moses Division [a1]	Brooklyn	L. A. Held	Roent.	3,546	420	17	1	7/1	1	100.00
Methodist Hospital [a1]	Brooklyn	G. W. Cramp	Rad.	9,538	1,186	132	2	7/1	2	.....
Edward J. Meyer Memorial Hospital [a1]	Buffalo	E. G. Eschner	Rad.	28,698	2,834	21	5	7/1	3	100.00
†Clifton Springs Sanitarium and Clinic [1]	Clifton Springs, N. Y	G. S. Schwarz	D.R.	5,057	1,255	122	1	.....	1	.....
Meadowbrook Hospital*	Hempstead, N. Y	G. L. Carr	Rad.	8,174	3,403	24	2	.....	2	.....
Queens General Hospital*	Jamaica, N. Y	I. S. Startz	Rad.	42,797	52	6,417	2	7/1	2	80.00
†Charles S. Wilson Memorial Hospital [a1]	Johnson City, N. Y	B. D. Jay	Roent.	13,133	1,667	207	1	7/1	1	.....
†Mount Vernon Hospital*	Mount Vernon, N. Y	L. M. Bond	Rad.	6,848	1,228	12	1	.....	1	.....
Bellevue Hospital	New York City	I. M. Kaplan	Rad.	102,004	5,330	479	..	.....	..	100.00
Div. III—N. Y. Univ. [a1]	New York City		Ther.Rad.	.....	.....	...	5	.....	1	.....
Div. IV—Open Div. [a1]	New York City		D.R.	.....	.....	...	5	.....	1	.....
Beth Israel Hospital [a1]	New York City	A. J. Bendick	Rad.	10,008	2,682	24	2	7/1	3	50.00
Bronx Hospital [a1]	New York City	W. Snow	Rad.	10,578	2,596	43	2	7/1	2	75.00
†Doctors Hospital [1]	New York City	A. J. Cillingham	Roent.	5,941	1,234	...	1	1, 7/1	1	200.00
Flower and Fifth Avenue Hospitals [a1]	New York City	F. Borrelli	Rad.	12,758	2,026	35	2	7/1	3	.....
French Hospital*	New York City	E. M. Claiborne	Rad.	13,246	1,679	...	1	.....	2	.....
Goldwater Memorial Hospital [a1]	New York City	H. K. Taylor	Roent.	12,420	126	...	1	7/1	2	130.00
Hospital for Joint Diseases [a1]	New York City	M. M. Pomeranz	Rad.	20,252	2,239	26	1	1/1	3	40.00
Lenox Hill Hospital [a1]	New York City	F. H. Ghiselin	Roent.	21,574	3,420	28	3	Varies	2	50.00
Lincoln Hospital [a1]	New York City	E. Kraft	Rad.	31,149	1,230	20	2	.....	1	.....
Memorial Hospital	New York City	R. S. Sherman	D.R.	31,089	48,280	701	2	.....	1	.....
Metropolitan Hospital [a1]	New York City	T. B. Weinberg	Rad.	24,437	.....	...	2	.....	2	.....
Montefiore Hospital for Chronic Diseases [a1]	New York City	S. Fineman	Rad.	18,061	6,513	95	4	1/1, 7/1	2	50.00
Morrisania City Hospital [a1]	New York City	S. F. Weitzner	Rad.	.....	3,591	56	1	7/1	2	80.00
Mount Sinai Hospital [a1]	New York City	M. L. Sussman	Rad.	33,125	7,774	99	5	.....	3	50.00
New York City Hospital [a1]	New York City	C. Gottlieb	D.R.	14,203	152	...	3	7/1	1	130.00
New York Hospital*	New York City	H. Temple	Rad.	73,301	13,432	160	5	7/1	3	25.00
New York Polyclinic Medical School and Hospital*	New York City	W. H. Shehadi	Rad.	8,556	2,401	22	2	7/1	2	50.00
Presbyterian Hospital [a1]	New York City	R. Golden	Rad.	84,939	18,632	412	10	.....	3	41.66
Roosevelt Hospital [a1]	New York City	C. Smith	Rad.	25,487	2,250	...	4	7/1	3	70.00
St. Luke's Hospital*	New York City	E. E. Smith	Rad.	25,645	4,652	...	3	7	2	50.00
†St. Vincent's Hospital*	New York City	W. W. Maver and C. Oderr	Rad.	23,756	3,138	74	2	7/1	1	50.00
Sydenham Hospital [a1]	New York City	A. S. Unger	Roent.	6,559	483	...	1	7	1	35.00
University Hospital*	New York City	S. L. Berenbaum	Rad.	15,821	3,219	547	4	.....	2	.....
Genesee Hospital [a1]	Rochester, N. Y	G. Baron	Roent.	15,807	1,053	30	1	1	1	20.83
Rochester General Hospital [a1]	Rochester, N. Y	E. F. Merrill	Rad.	18,647	3,190	31	2	7/1	3	70.00
†St. Mary's Hospital [a1]	Rochester, N. Y	V. Winchell and H. Forsyth	Rad.	7,846	2,123	14	1	7/1	1	125.00
Strong Memorial—Rochester Municipal Hospitals [a1]	Rochester, N. Y	C. H. Ramsey	Rad.	22,554	7,048	335	9	.....	3	45.00
Ellis Hospital [a1]	Schenectady, N. Y	K. L. Mitton	Roent.	10,053	1,434	...	1	.....	1	.....
Sea View Hospital [1]	Staten Island, N. Y	A. V. Shapiro	D.R.	18,030	...	...	2	.....	1	.....
†Crouse-Irving Hospital [a1]	Syracuse, N. Y	C. F. Potter	Roent.	5,560	488	...	1	.....	1	.....
Grasslands Hospital [a1]	Valhalla, N. Y	A. G. Debbie	Rad.	15,242	4,392	71	3	7	3	125.00
Charlotte Memorial Hospital*	Charlotte, N. C	W. C. A. Sternbergh	Rad.	14,748	1,906	113	1	7/1	1	75.00
Duke Hospital [a1]	Durham, N. C	R. J. Reeves	Rad.	40,914	11,630	444	7	7/1	3	83.33
Watts Hospital*	Durham, N. C	W. W. Vaughan	Rad.	24,683	7,471	97	1	7/1	3	50.00
†City Memorial Hospital [a1]	Winston-Salem, N. C	J. Selman	Roent.	19,715	2,029	14	1	.....	1	.....
North Carolina Baptist Hospital [a1]	Winston-Salem, N. C	J. P. Rousseau	Rad.	17,370	11,637	73	3	4/1	3	.....
†Bismarck Evangelical Hospital	Bismarck, N. D	H. M. Berg	Rad.	16,250	3,125	30	1	.....	1	115.00
City Hospital*	Akron, Ohio	F. T. Moore	Rad.	26,994	8,770	89	2	7/1	3	100.00
†Peoples Hospital*	Akron, Ohio	E. L. Voke	Rad.	9,564	6,272	39	2	.....	1	100.00
†Mercy Hospital*	Canton, Ohio	T. J. Dodd	Rad.	16,345	3,062	50	1	7/1	1	100.00
Cincinnati General Hospital [a1]	Cincinnati	H. G. Reimer and B. Felson	Rad.	35,958	7,091	41	7	7/1	3	.....
Jewish Hospital*	Cincinnati	S. Brown	Rad.	1,674	2,241	99	1	7/1	3	75.00
City Hospital [a1]	Cleveland	H. Hauser	Rad.	28,289	6,208	110	4	.....	3	.....
Cleveland Clinic Hospital [1]	Cleveland	C. R. Hughes	Rad.	74,736	8,713	273	10	7/1	3	100.00
†Lutheran Hospital*	Cleveland	J. A. Groh	Rad.	8,586	2,771	...	3	7/1	1	.....
†Mount Sinai Hospital*	Cleveland	H. A. Mahrer	Rad.	10,452	2,411	21	2	.....	1	65.00
†St. Alexis Hospital*	Cleveland	F. P. McManee	Rad.	9,655	.....	30	1	.....	1	.....
St. Luke's Hospital*	Cleveland	D. D. Brannan	Rad.	22,065	4,483	8	3	6/25	3	66.00
St. Vincent's Charity Hospital*	Cleveland	E. J. O'Malley	Rad.	12,440	1,246	20	3	7/1	3	75.00
University Hospitals*	Cleveland	H. L. Friedell	Rad.	37,804	550	...	4	7/1	3	25.00
Ohio State University Hospital*	Columbus, Ohio	H. J. Means	Rad.	21,502	4,442	49	4	7/1	3	50.00
†Miami Valley Hospital*	Dayton, Ohio	G. A. Nicoll	Rad.	12,573	2,470	41	2	7/1	1	75.00
†St. Vincent's Hospital*	Toledo, Ohio	C. E. Hufford	Rad.	9,452	.....	...	1	.....	1	.....
†Youngstown Hospital*	Youngstown, Ohio	E. C. Baker and J. Heberding	Rad.	22,848	9,584	31	2	7/1	1	100.00
University Hospitals*	Oklahoma City	P. E. Russo	Rad.	17,231	12,554	140	2	7/1	1	35.00
Good Samaritan Hospital*	Portland, Ore	G. B. Isenhart	Rad.	10,086	1,437	48	1	.....	3	.....
†Providence Hospital*	Portland, Ore	S. E. Rees	Roent.	9,616	2,700	...	1	7/1	1	75.00

Numerical and other references will be found on page 225.

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24. RADIOLOGY—Continued

Name of Hospital	Location	Chief of Service	Type of Training [13]	Roentgenographic Examinations	X-Ray Treatments	Radium Treatments	Asst. Res. and Res. Posts Offered *	Beginning of Service (1949)	Length of Approved Program (Years)	Beginning Stipend (Month)
St. Vincent's Hospital*	Portland, Ore.	S. E. Rees	Rad.	11,165	2,228	...	2	.....	3	.....
University of Oregon Medical School Hospitals and Clinics*[1]	Portland, Ore.	W. Y. Burton	Rad.	20,332	4,662	29	4	7/1	3	$ 75.00
Abington Memorial Hospital*	Abington, Pa.	J. D. Zulick	Rad.	16,047	3,181	105	2	7/1	3	50.00
Bryn Mawr Hospital*	Bryn Mawr, Pa.	R. S. Bromer	Rad.	16,166	4,352	152	2	.....	3	.....
Geo. F. Geisinger Memorial Hospital*	Danville, Pa.	C. L. Hinkel	Rad.	11,318	2,273	48	2	7/1	3	75.00
St. Vincent's Hospital*	Erie, Pa.	B. S. Putts and R. Bacon	Rad.	8,322	667	39	..	.....	1	.....
†American Oncologic Hospital [1]	Philadelphia	W. S. Newcomet	Ther.Rad.	1,957	9,003	355	1	7/1	1	150.00
Episcopal Hospital*[1]	Philadelphia	D. A. Sampson	Rad.	11,488	2,640	29	2	7/1	2	50.00
†Frankford Hospital*	Philadelphia	M. T. Woodruff	Rad.	.....	.....	...	1	.....	2	.....
†Germantown Dispensary and Hospital*	Philadelphia	B. R. Young	Rad.	15,638	940	50	1	7	1	50.00
Graduate Hospital of the University of Pennsylvania*	Philadelphia	A. Finklestein	Rad.	18,524	4,800	172	8	7/1	3	.....
Hahnemann Hospital*[1]	Philadelphia	J. W. Frank	Rad.	16,816	2,657	526	2	.....	2	25.00
Hospital of the University of Pennsylvania*[1]	Philadelphia	E. P. Pendergrass	Rad.	90,512	26,570	90	21	Varies	3	.....
Jeanes Hospital [1]	Philadelphia	E. E. Lane	Ther.Rad.	3,916	238	31	1	3/1	2	90.00
Jefferson Medical College Hospital*	Philadelphia	P. C. Swenson	Rad.	36,022	9,459	7,734	8	7/1	3	.....
Jewish Hospital*[1]	Philadelphia	L. Solis-Cohen	Rad.	18,460	5,732	104	3	7	3	75.00
Lankenau Hospital*	Philadelphia	M. M. Meyers	Rad.	8,952	2,974	52	2	.....	2	.....
Mount Sinai Hospital*[1]	Philadelphia	L. Edelkin and G. Rosenbaum	Rad.	9,988	745	97	2	6/21	3	50.00
†Nazareth Hospital*	Philadelphia	J. S. Fetter	Roent.	10,068	2,894	27	1	7/1	1	100.00
Pennsylvania Hospital*	Philadelphia	P. A. Bishop	Rad.	13,802	2,158	193	2	6/1, 10/1	3	20.00
Philadelphia General Hospital*[1]	Philadelphia	B. P. Widmann	Rad.	64,068	14,421	151	6	7/1	2	70.00
Presbyterian Hospital*	Philadelphia	E. L. Lame	Rad.	8,306	2,686	24	2	.....	2	25.00
Temple University Hospital*[1]	Philadelphia	W. E. Chamberlain	Rad.	30,272	9,380	77	5	7/1	3	.....
Mercy Hospital*[1]	Pittsburgh	J. A. L. McCullough	Rad.	26,482	5,117	146	1	9/1	1	100.00
Montefiore Hospital*	Pittsburgh	M. Goldsmith	Rad.	9,445	2,221	...	1	7/1	3	50.00
†St. Francis Hospital*	Pittsburgh	L. H. Osmond	Rad.	39,778	1,045	51	1	7/1	1	100.00
University of Pittsburgh Medical Center	Pittsburgh	G. W. Grier	Rad.	.....	.....	...	2	.....	3	.....
Western Pennsylvania Hospital*[1]	Pittsburgh	R. G. Alley and E. J. Euphrat	Rad.	13,627	6,541	135	2	10/1	3	.....
†Reading Hospital*[1]	Reading, Pa.	G. W. Chamberlain	Rad.	11,715	4,718	5	2	7/1	1	150.00
Robert Packer Hospital*	Sayre, Pa.	S. P. Perry	Rad.	15,717	3,801	26	2	7/1	3	150.00
†Chester County Hospital	West Chester, Pa.	J. Gershon-Cohen	Roent.	.....	.....	...	1	.....	1	.....
†Columbia Hospital	Wilkinsburg, Pa.	.....	Roent.	.....	.....	...	1	.....	1	.....
†Rhode Island Hospital*[1]	Providence, R. I.	L. A. Martineau	Rad.	24,543	3,121	...	2	.....	1	50.00
Roper Hospital*[1]	Charleston, S. C.	H. Rudisill, Jr.	Rad.	12,862	3,039	37	4	7/1	3	25.00
†Columbia Hospital*[1]	Columbia, S. C.	G. W. Smith	Roent.	7,072	21,012	...	1	.....	1	.....
Baptist Memorial Hospital*	Memphis, Tenn.	J. E. Whitelaether	Rad.	12,474	2,895	363	2	7/1	3	75.00
John Gaston Hospital*	Memphis, Tenn.	D. Carroll	Rad.	21,592	3,285	46	2	.....	3	.....
Methodist Hospital*[1]	Memphis, Tenn.	J. C. King	Rad.	12,741	5,044	...	4	7/1	3	75.00
†Geo. W. Hubbard Hospital of Meharry Medical College*	Nashville, Tenn.	Johnson	Rad.	3,095	1,187	15	1	7/1	1	75.00
Vanderbilt University Hospital*[1]	Nashville, Tenn.	C. C. McClure	Rad.	16,041	4,038	79	3	7/1	3	35.41
Baylor University Hospital*[1]	Dallas, Texas.	F. M. Windrow	Rad.	12,369	419	20	1	7/1	3	50.00
†Methodist Hospital*	Dallas, Texas.	M. L. Mazer	D.R.	7,649	924	54	1	7/1	1	75.00
Parkland Hospital*[1]	Dallas, Texas.	J. E. Miller	Rad.	2,771	2,771	82	2	7/1	3	50.00
University of Texas Medical Branch Hosps.*[1]	Galveston, Texas.	M. Schneider	Roent.	27,869	3,851	40	6	7	3	50.00
†Methodist Hospital*[1]	Houston, Texas.	C. H. Burge	Roent.	8,837	1,951	18	1	.....	1	.....
†St. Joseph's Infirmary*	Houston, Texas.	P. E. Wigby	Rad.	8,809	5,164	60	1	.....	1	.....
†Santa Rosa Hospital*	San Antonio, Texas.	M. Davis	D.R.	15,528	1,329	10	1	.....	1	.....
Scott and White Hospital*	Temple, Texas.	.....	Rad.	47,186	6,803	...	4	.....	3	150.00
†Wichita Falls Clinic Hospital*	Wichita Falls, Texas.	G. D. Wilson	Rad.	15,321	2,799	12	1	7/1	1	400.00
†Salt Lake County General Hospital*[1]	Salt Lake City.	H. P. Plenk	D.R.	7,004	1,980	...	2	7/1	1	50.00
Mary Fletcher Hospital*	Burlington, Vt.	O. S. Peterson, Jr. and A. B. Soule, Jr.	Rad.	9,503	3,712	189	4	2/1	1	83.30
University of Virginia Hospital*[1]	Charlottesville, Va.	V. W. Archer	Rad.	30,148	6,916	100	6	.....	3	.....
†De Paul Hospital*[1]	Norfolk, Va.	W. Whitmore	Roent.	6,420	1,413	48	1	7/1	1	150.00
†Norfolk General Hospital*	Norfolk, Va.	P. B. Parsons and L. B. Waters	Rad.	17,651	6,169	179	1	7/1	1	100.00
Medical College of Virginia, Hospital Division*[1]	Richmond, Va.	F. B. Mandeville	Rad.	22,553	6,380	101	4	7/1	3	46.50
†Swedish Hospital (Tumor Clinic)*	Seattle, Wash.	T. Blake	Ther.Rad.	.....	5,373	206	2	.....	1	.....
Virginia Mason Hospital*	Seattle, Wash.	T. Carlile	Rad.	19,068	4,101	83	1	.....	3	75.00
†Sacred Heart Hospital*	Spokane, Wash.	M. Harris	Rad.	.....	.....	...	1	.....	1	.....
Methodist Hospital*	Madison, Wis.	W. Waskow	D.R.	.....	.....	...	..	.....	1	.....
State of Wisconsin General Hospital*[1]	Madison, Wis.	E. A. Pohle	Rad.	35,329	8,081	179	6	7	3	25.00
Columbia Hospital*	Milwaukee.	S. A. Morton and R. W. Byrne	Rad.	29,446	2,781	...	1	.....	3	.....
†Evangelical Deaconess Hospital*	Milwaukee.	A. M. Melamed	D.R.	9,804	1,750	24	1	.....	1	150.00
†Milwaukee County Hospital*[1]	Milwaukee.	J. L. Marks	D.R.	27,718	1,634	31	3	Varies	1	158.02
†Milwaukee Hospital*	Milwaukee.	H. Hefke	Rad.	12,416	17,901	85	1	.....	1	.....
†Queen's Hospital*[1]	Honolulu, Hawaii.	L. L. Buzaid	Rad.	11,348	2,940	25	1	7	1	75.00

25. SURGERY

The services listed below are approved by the Council and the American Board of Surgery until July 1, 1950, as previously announced (Internship and Residency Number, The Journal, May 1, 1948). These services presently are being re-appraised in accordance with a plan of residency training to be announced by the American Board of Surgery.

A revised list of approved residencies in Surgery will appear in the Educational Number of The Journal, scheduled for publication in the early fall. Physicians planning to apply for residency training in surgery to begin on or after July 1, 1950, should consult this list in making application for appointment.

Hospitals, 562; Assistant Residencies and Residencies, 3,543

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
United States Army									
Letterman General Hospital*	San Francisco.	L. D. Heaton	1,411	2,656	22	18	9	.....	n
Fitzsimons General Hospital*	Denver.	J. H. Forsee	1,594	1,952	40	36	9	.....	n
Walter Reed General Hospital*	Washington, D. C.	F. E. Hamilton	813	5,582	18	16	16	1, 7	n

Numerical and other references will be found on page 225.

25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated*	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered*	Beginning of Service (1949)	Beginning Stipend (Month)
Oliver General Hospital*	Augusta, Ga.	E. C. Lowry	1,561	378	8	8	7	1/1, 7/1	n
Brooke General Hospital*	San Antonio, Texas	S. F. Seeley	7,238	8,472	60	53	19	.....	n
Gorgas Hospital*	Ancon, C. Z.		5,380	23,765	..	..	5	1/1	n
United States Navy									
U. S. Naval Hospital*	Long Beach, Calif.	L. L. Bean	2,794	2,199	21	20	8	Varies	n
U. S. Naval Hospital*	Oakland, Calif.	H. H. Young	.....	.....	..	..	5	.....	n
U. S. Naval Hospital*	San Diego	T. G. Hayes	3,005	4,783	41	36	6	.....	n
U. S. Naval Hospital*	Jacksonville, Fla.		.....	.....	..	..	1	.....	n
U. S. Naval Hospital*	Pensacola, Fla.	C. R. Moon	346	1,936	13	4	1	.....	n
U. S. Naval Hospital*	Great Lakes, Ill.	G. A. Gray	1,023	1,279	8	6	4	Varies	n
U. S. Naval Hospital[1]	Annapolis, Md.	P. K. Perkins	715	2,301	..	..	1	.....	n
U. S. Naval Hospital*	Bethesda, Md.	H. A. Gross	3,187	639	34	9	6	.....	n
U. S. Naval Hospital*	Chelsea, Mass.	M. L. Connerley	.....	.....	..	..	2	.....	n
U. S. Naval Hospital	Brooklyn		.....	.....	..	..	1	.....	n
U. S. Naval Hospital*	St. Albans, N. Y.	J. J. Wells	2,084	120	32	26	5	.....	n
U. S. Naval Hospital*	Philadelphia	L. G. Bell	5,989	5,052	65	32	6	.....	n
U. S. Naval Hospital*	Newport, R. I.		.....	.....	..	..	2	.....	n
U. S. Naval Hospital*	Portsmouth, Va.		.....	.....	..	..	2	.....	n
United States Public Health Service									
U. S. Marine Hospital*	San Francisco	C. P. Cooper	.....	11,397	26	14	8	7/1	n
U. S. Marine Hospital*	Chicago	R. W. Flynn	.....	.....	..	..	2	.....	n
U. S. Marine Hospital*[1]	New Orleans	O. C. Williams	2,250	4,043	15	10	5	7/1	n
U. S. Marine Hospital*	Baltimore	J. D. Lane, Jr.	2,966	6,173	16	14	8	7/1	n
U. S. Marine Hospital*	Boston	H. D. Fishburn	2,050	7,742	20	15	3	.....	n
U. S. Marine Hospital*	Detroit	M. B. Noyes	1,461	2,464	20	..	4	7/1	n
†U. S. Marine Hospital*[1]	Stapleton, S. I., N. Y.	H. L. Skinner	7,314	17,585	67	30	12	7/1	n
U. S. Marine Hospital*	Savannah	M. E. Myers	1,570	3,400	13	10	1	7/1	n
†U. S. Marine Hospital*	Seattle	T. S. McGowan	2,601	19,848	35	29	6	7/1	n
Federal Security Agency									
Freedmen's Hospital*[1]	Washington, D. C.	C. R. Drew	1,327	6,638	62	10	12	7/1	n
Veterans Administration									
Veterans Admin. Center[1]	Los Angeles	F. X. Byron	3,441	7,766	2	2	21	.....	n
Veterans Admin. Hospital[1]	San Francisco	H. L. Silvani	1,365	2,923	17	14	11	7/1	n
Veterans Admin. Hospital[1]	San Diego, Calif.	J. Weinberg	1,556	2,881	61	52	13	1/1, 7/1	n
Veterans Admin. Hospital[1]	Fort Logan, Colo.	P. M. Ireland	827	.....	19	15	8	7	n
Veterans Admin. Hospital	Newington, Conn.	A. Hurwitz	2,002	3,284	27	20	11	7/1	n
†Veterans Admin. Hospital[1]	Washington, D. C.	J. G. Lee	932	1,833	7	33	7	7/1	n
Veterans Admin. Hospital	Coral Gables, Fla.	M. H. Todd	1,151	440	7	5	9	7/1	n
Veterans Admin. Hospital	Chamblee, Ga.	W. H. Proctor, Jr.	1,107	780	61	42	17	7/1	n
†Veterans Admin. Hospital	Hines, Ill.	C. B. Puestow	4,970	.....	95	61	52	1/2, 7/1	n
†Veterans Admin. Hospital[1]	Indianapolis	H. L. Egbert	1,935	.....	35	29	10	1, 7	n
Veterans Admin. Center	Des Moines, Iowa	L. T. Palumbo	3,577	0	47	33	19	1, 7	n
†Veterans Admin. Center	Wadsworth, Kan.	W. I. Hinkle	2,128	0	38	37	11	7, 1	n
†Veterans Admin. Hospital[1]	Louisville, Ky.	J. E. Hamilton	1,633	8	..	..	18	.....	n
†Veterans Admin. Hospital[1]	New Orleans	L. K. Richardson	903	284	23	16	12	7/1	n
†Veterans Admin. Hospital	Fort Howard, Md.	J. M. Miller	1,016	578	14	8	6	Varies	n
Veterans Admin. Hospital	Perry Pt., Md.	R. T. Shackelford	875	.....	10	5	5	7	n
Veterans Admin. Hospital (West Roxbury)[1]	Boston	R. Warren	3,207	6,358	49	30	10	7	n
†Veterans Admin. Hospital[1]	Framingham, Mass.		1,731	.....	13	9	8	7/1	n
†Veterans Admin. Hospital	Dearborn, Mich.	G. S. Bates	3,015	6,280	122	79	17	7/1	n
Veterans Admin. Hospital	Minneapolis		1,717	.....	48	35	21	.....	n
†Veterans Admin. Hospital[1]	Jefferson Bks., Mo.		1,579	.....	20	20	19	.....	n
†Veterans Admin. Hospital	Lincoln, Neb.		935	.....	30	23	5	.....	n
Veterans Admin. Hospital	Albuquerque, N. M.		429	.....	1	4	5	7/1	n
Veterans Admin. Hospital	Batavia, N. Y.	W. H. Sears	1,646	29	35	25	9	7/1	n
Veterans Admin. Hospital	New York City	P. K. Sauer	2,141	1,356	63	43	16	1, 7	n
†Veterans Admin. Hospital[1]	Staten Island, N. Y.	M. K. Smith	1,297	665	11	7	16	7/1	n
†Veterans Admin. Hospital[1]	Cleveland	P. F. Partington	2,020	214	43	38	18	.....	n
†Veterans Admin. Center	Dayton, Ohio	M. Wood	972	.....	18	10	15	.....	n
†Veterans Admin. Hospital[1]	Oklahoma City	F. A. Quenzer	844	.....	32	24	5	7	n
Veterans Admin. Hospital	Portland, Ore.	R. A. Wise	1,508	.....	25	19	19	1/1, 7/1	n
†Veterans Admin. Hospital	Aspinwall, Pa.	W. W. Fellows	1,253	.....	24	13	12	7/1	n
Veterans Admin. Hospital	Columbia, S. C.	K. M. Lippert	1,638	.....	26	10	5	7	n
†Veterans Admin. Hospital	Memphis, Tenn.	R. F. Bowers	2,905	4,141	44	27	22	7/1	n
Veterans Admin. Hospital	Nashville, Tenn.	R. S. McCleery	2,809	.....	39	27	13	7/1	n
Veterans Admin. Hospital[1]	Dallas, Texas	L. J. Kleinsasser	881	.....	14	10	6	1/1, 7/1	n
†Veterans Admin. Hospital[1]	McKinney, Texas	J. P. North	.....	.....	..	..	14	.....	n
Veterans Admin. Hospital	Salt Lake City	J. A. Gubler	.....	.....	..	..	11	7	n
Veterans Admin. Center[1]	White River Jct., Vt.	W. B. Crandell	2,041	.....	23	21	11	7/1	n
†Veterans Admin. Hospital[1]	Richmond, Va.	R. F. MacDonald	1,319	.....	14	10	12	7/1	n
Veterans Admin. Center[1]	Milwaukee	R. T. Cunningham	1,601	1,240	35	21	11	7/1	n
Nonfederal									
Jefferson-Hillman Hospital*[1]	Birmingham, Ala.	R. Gutherie	3,008	11,920	85	26	9	.....	.....
Carraway Methodist Hospital*	Birmingham, Ala.	C. N. Carraway	976	15,352	9	3	5	7/1	$100.00
Employees' Hospital of the Tennessee Coal, Iron and Railroad Company*	Fairfield, Ala.	L. Noland and R. A. Hamrick	1,390	16,816	37	17	4	7/1	225.00
St. Joseph's Hospital*	Phoenix, Ariz.	P. T. Brown	3,208	0	42	19	1	7/1	150.00
†St. Monica's Hospital and Health Center*[1]	Phoenix, Ariz.	D. A. Polson	778	.....	36	23	1	9/1	200.00
†St. Mary's Hospital and Sanitarium*	Tucson, Ariz.	J. B. Littlefield	3,570	1,037	39	18	1	7/1	175.00
Tucson Medical Center*[1]	Tucson, Ariz.	J. B. Littlefield	683	760	9	4	2	7/1	200.00
Arkansas Baptist Hospital*[1]	Little Rock, Ark.	R. M. Eubanks	1,649	.....	90	24	3	7	75.00
†St. Vincent's Infirmary	Little Rock, Ark.	H. G. Hollenberg	4,775	.....	71	22	1	6/10	100.00
†University Hospital*[1]	Little Rock, Ark.	G. Dean	813	5,130	54	27	10	7/1	50.00
Herrick Memorial Hospital*[1]	Berkeley, Calif.	S. H. Babington	3,031	8,459	12	6	2	7/1	50.00
San Joaquin General Hospital*[1]	French Camp, Calif.	W. Brock	3,673	.....	172	113	4	7/1	210.00
General Hospital of Fresno County*	Fresno, Calif.	C. M. Vanderburgh	833	3,602	43	14	4	7/1	231.00
Seaside Memorial Hospital*[1]	Long Beach, Calif.	C. A. Lauer	6,210	.....	131	57	4	7	150.00
California Hospital*[1]	Los Angeles	W. F. Quinn	2,404	458	38	19	5	7/1	100.00
Cedars of Lebanon Hospital*[1]	Los Angeles		5,050	3,986	86	37	9	.....	50.00

Numerical and other references will be found on page 225.

25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated*	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Residencies Offered*	Beginning of Service (Mo.)	Beginning Stipend (Month)
Hospitals of the Good Samaritan*[1]	Los Angeles	P. J. Cunnane	7,646	4,580	101	39	3	7/1	$150.00
Los Angeles County Hospital*[1]	Los Angeles	L. B. Sherry	4,785	11,528	387	154	12	Varies	165.00
Queen of Angels Hospital*	Los Angeles		2,981	115	..	43	3	.....	.....
St. Vincent's Hospital*	Los Angeles	F. J. Breslin	4,021	.....	27	21	2	.....	.....
Santa Fe Coast Lines Hospital*	Los Angeles		1,051	.....	21	9	2	7/1	195.00
White Memorial Hospital*	Los Angeles	C. E. Stafford	1,064	9,199	35	24	5	7/1	140.20
Highland-Alameda County Hospital*[1]	Oakland, Calif.	S. Everingham and W. W. Crane	886	.....	54	34	3	.....	100.00
Peralta Hospital [1]	Oakland, Calif.	G. McClure	3,850	.....	84	32	3	7/1	125.00
Permanente Foundation Hospital*[1]	Oakland, Calif.	A. L. Baritell	1,430	20,802	37	32	1	.....	.....
Samuel Merritt Hosp.tal	Oakland, Calif.	W. Crane	1,524	.....	..	..	3	1/18	110.00
Collis P. and Howard Huntington Memorial Hospital*	Pasadena, Calif.		1,105	.....	10	9	2	7/1	.....
San Bernardino County Charity Hospital*	San Bernardino, Calif.	C. J. Clock	730	5,619	64	30	3	1/1	120.00
Mercy Hospital*	San Diego	J. J. O'Hara	6,236	.....	33	16	2	7/1	150.00
San Diego County General Hospital*	San Diego	H. Holder	1,434	4,077	76	24	3	7/1	125.00
Children's Hospital*[1]	San Francisco	A. K. Kilgore	735	1,412	..	..	1	7/1	50.00
Franklin Hospital*[1]	San Francisco	T. F. Mullen	2,067	.....	15	8	7	7/1	100.00
French Hospital*[1]	San Francisco	W. L. Rogers	96	.....	12	5	2	7	105.00
Mary's Help Hospital*[1]	San Francisco	E. Carlson	1,864	8,797	36	16	2	.....	.....
Mount Zion Hospital*[1]	San Francisco	F. I. Harris	943	1,671	26	22	7	7/1	50.00
St. Luke's Hospital*[1]	San Francisco	G. D. Delprat	3,594	1,480	59	24	2	7/1	100.00
St. Mary's Hospital*[1]	San Francisco		.....	.....	..	..	6	7/1	150.00
San Francisco Hospital*[1]	San Francisco	C. Mathewson, Jr.	1,924	.....	58	20	11	.....	175.00
Southern Pacific General Hosp.tal	San Francisco		.....	.....	..	..	4	.....	.....
Stanford University Hospital*[1]	San Francisco	E. F. Holman	2,392	11,162	67	29	10	7/1	50.00
University of California Hospital*[1]	San Francisco	H. G. Bed	1,546	8,803	33	18	9	7/1, 8/1, 9/1	50.00
Santa Clara County Hospital*	San Jose, Calif.	D. Fagerstrom	3,250	1,446	24	23	3	7/1	205.00
Santa Barbara Cottage Hospital*[1]	Santa Barbara, Calif.	W. F. Jennings	941	.....	8	8	4	7/1	100.00
St. John's Hospital*	Santa Monica, Calif.	G. Thomas	.....	.....	..	..	1	7	150.00
Childrens Hospital	Denver	G. B. Packard	3,171	673	18	18	1	7	50.00
Presbyterian Hospital*	Denver		.....	.....	..	..	..	.....	.....
St. Joseph's Hospital*	Denver		1,380	.....	9	3	4	7/1	85.00
St. Luke's Hospital*	Denver	G. F. Wollgast	5,528	.....	72	38	1	7/1	50.00
University of Colorado Medical Center									
Colorado General Hospital*[1]	Denver	J. M. Foster	624	3,702	40	31	14	7/1	75.00
†Denver General Hospital*[1]	Denver	G. D. Ellis	488	.....	42	24	5	7	40.00
Corwin Hospital*[1]	Pueblo, Colo.	S. B. Potter	1,401	16,819	17	6	1	7/1	75.00
Bridgeport Hospital*	Bridgeport, Conn.	M. L. Cheney	3,972	9,722	98	42	1	7/1	100.00
Hartford Hospital*[1]	Hartford, Conn.	W. A. Standish	4,654	841	71	45	9	7/1	50.00
St. Francis Hospital*	Hartford, Conn.	B. B. Landry	3,478	346	71	26	3	12/1	75.00
†New Britain General Hospital*[1]	New Britain, Conn.	B. B. Clark	1,731	.....	55	23	3	.....	75.00
Grace-New Haven Community Hospital Grace Unit*	New Haven, Conn.	R. Nichols	1,582	.....	38	14	4	7/1	50.00
New Haven Unit (University Service)*[1]	New Haven, Conn.	G. Lindskog	2,258	8,329	93	51	25	7/1	40.00
Hospital of St. Raphael*	New Haven, Conn.	W. F. Verdi	.....	.....	..	..	2	7/1	75.00
Lawrence and Memorial Associated Hospitals*[1]	New London, Conn.	F. B. Hartman	2,504	.....	51	13	2	7/1	125.00
Norwalk Hospital*	Norwalk, Conn.	W. H. McMahon	1,449	.....	33	12	2	7/1	155.00
Delaware Hospital*	Wilmington, Del.	L. J. Jones	4,339	12,488	99	64	2	7/1	90.00
Memorial Hospital*	Wilmington, Del.	J. G. Spackman	1,639	1,349	18	12	4	7/1	110.00
†Wilmington General Hospital	Wilmington, Del.	D. J. Preston	1,397	2,216	21	12	1	7/1	150.00
Central Dispensary and Emergency Hospital*[1]	Washington, D. C.		3,129	2,584	61	28	1	7/1	150.00
Doctors Hospital*	Washington, D. C.	C. S. White	1,877	.....	54	38	3	.....	.....
Gallinger Municipal Hospital*[1]	Washington, D. C.		1,499	8,022	83	33	6	7/1	100.00
Garfield Memorial Hospital*[1]	Washington, D. C.	J. O. Warfield	1,918	2,420	84	51	4	.....	.....
Georgetown University Hospital*	Washington, D. C.	R. J. Coffey	2,718	.....	43	18	12	7	25.00
†George Washington University Hospital*[1]	Washington, D. C.	B. B. Blades	457	315	3	2	6	7/1	50.00
Providence Hospital*	Washington, D. C.	P. S. Putzki and F. R. Sanderson	1,679	2,549	22	14	5	.....	75.00
Sibley Memorial Hospital*[1]	Washington, D. C.	P. S. Putzki	4,784	.....	50	40	7	7/1	75.00
Duval Medical Center*	Jacksonville, Fla.	E. Jelks	858	.....	70	37	4	7/1	125.00
Riverside Hosp.tal [1]	Jacksonville, Fla.		.....	.....	..	..	1	7/1	.....
†St. Luke's Hospital*	Jacksonville, Fla.	K. A. Morris	1,126	.....	19	4	2	7	125.00
St. Vincent's Hospital*	Jacksonville, Fla.	F. Waas	.....	31	2	..	2	7/1	100.00
Jackson Memorial Hospital*[1]	Miami, Fla.	J. C. Turner	10,468	7,156	165	91	7	7/1	60.00
Crawford W. Long Memorial Hospital*[1]	Atlanta, Ga.	H. Rubin	3,464	239	60	21	9	7/1	75.00
Georgia Baptist Hospital*[1]	Atlanta, Ga.	T. C. Davison	1,509	900	22	8	5	7/1	75.00
Grady Memorial Hospital*[1]	Atlanta, Ga.	I. Ferguson	3,.65	30,134	174	60	24	7/1	.....
Piedmont Hospital*[1]	Atlanta, Ga.		2,519	.....	34	16	2	7/1	75.00
St. Joseph's Infirmary*	Atlanta, Ga.	W. P. Nicolson	2,592	1,418	65	24	3	7/1	100.00
University Hospital*	Augusta, Ga.	J. H. Sherman	2,235	.....	63	20	7	.....	40.00
Emory University Hospital*	Emory University, Ga.	D. C. Elkin	2,909	.....	31	20	6	7/1	50.00
American Hospital*[1]	Chicago	M. Thorek and P. Thorek	.....	.....	..	..	1	7/1	50.00
Augustana Hospital*	Chicago	N. M. Percy	3,133	2,923	77	47	7	7/1	50.00
Chicago Memorial Hospital*[1]	Chicago	J. Van Fenhaska	1,125	1,820	29	22	2	.....	200.00
Children's Memorial Hospital [1]	Chicago	W. J. Potts	2,295	3,254	37	33	1	1, 7	75.00
Cook County Hospital*[1]	Chicago	K. A. Meyer	11,551	9,026	914	..	26	1, 7	32.00
Grant Hospital*[1]	Chicago	L. Seed	1,788	4,215	16	8	2	7/1	145.00
Henrotin Hospital*[1]	Chicago	C. B. Puestow	1,440	8,691	22	12	1	.....	100.00
Hospital of St. Anthony de Padua*	Chicago	F. B. Olentine	2,650	.....	17	3	1	.....	150.00
†Illinois Central Hospital*[1]	Chicago	C. C. Guy	638	.....	10	1	2	1/1, 7/1	125.00
Illinois Masonic Hospital*[1]	Chicago	Shambaugh	1,503	.....	66	15	3	.....	.....
Lutheran Deaconess Home and Hospital*[1]	Chicago		4,209	.....	52	19	3	1	100.00
Mercy Hospital—Loyola University Clinics*	Chicago	J. B. O'Donoghue	1,746	3,769	67	28	9	.....	25.00
Michael Reese Hospital*[1]	Chicago	N. Crohn	2,392	4,739	..	..	5	.....	25.00
Mount Sinai Hospital*[1]	Chicago	S. F. Strauss	1,509	2,045	22	12	3	7/1	50.00
Norwegian-American Hospital*[1]	Chicago	P. Snyder	2,471	.....	26	8	3	7	150.00
Passavant Memorial Hospital*[1]	Chicago	L. Davis	2,967	15,842	49	33	5	7/1	.....
Presbyterian Hospital*	Chicago	V. C. David	2,579	3,066	56	34	5	.....	25.00
Provident Hospital*[1]	Chicago	T. C. Raines	1,220	1,377	43	24	4	7/1	50.00
Ravenswood Hospital*[1]	Chicago	E. C. Helfers	2,445	2,880	60	49	3	Varies	60.00
Research and Educational Hospitals*[1]	Chicago	W. H. Cole	862	9,271	..	..	4	7/1	55.00
St. Anne's Hospital*	Chicago	P. F. Fox	1,394	.....	54	15	2	1, 7	125.00
St. Elizabeth Hospital*	Chicago	M. G. Luken	3,241	.....	..	..	3	1, 7	60.00
St. Joseph Hospital*	Chicago	H. McKenna	1,607	606	18	10	2	1, 7	75.00
St. Luke's Hospital*	Chicago	W. Van Hazel	4,135	1,624	102	54	8	7/1	25.00
St. Mary of Nazareth Hospital*	Chicago	T. M. Larkowski	2,336	7,316	79	29	4	.....	100.00

Numerical and other references will be found on page 225.

25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated*	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Residencies Offered†	Beginning of Service (1949)	Beginning Stipend (Month)
University of Chicago Clinics*‡	Chicago	L. R. Dragstedt	1,979	18,706	60	45	9	7/1	$ 25.00
Wesley Memorial Hospital*‡	Chicago	R. W. McNealy	2,593	.....	21	16	10	.....	25.00
Women's and Children's Hospital*‡	Chicago	K. T. True	297	531	5	2	1	.....	.....
Woodlawn Hospital*‡	Chicago	H. P. Jenkins	1,174	545	15	8	2	2	150.00
Evanston Hospital*	Evanston, Ill.	F. Christopher	2,260	3,102	24	18	3	.....	50.00
St. Francis Hospital*	Evanston, Ill.		3,640	.....	53	30	3	7/1	75.00
Little Company of Mary Hospital*	Evergreen Park, Ill.	E. Huntington	4,982	.....	32	6	1	7/1	100.00
St. Francis Hospital*‡	Peoria, Ill.	C. D. Bruns	1,622	5,414	41	19	2	7, 1	150.00
Indianapolis General Hospital*	Indianapolis	F. W. Taylor	1,307	6,753	75	37	5	7/1	80.00
Indiana University Medical Center*‡	Indianapolis	H. B. Shumacker	1,173	3,915	56	45	6	7/1	68.33
Methodist Hospital*‡	Indianapolis	F. B. Ramsey	3,817	.....	101	32	7	7/1	200.00
†St. Vincent's Hospital*‡	Indianapolis	K. R. Ruddell	1,744	1,495	33	16	4	7/1	200.00
†St. Elizabeth Hospital*‡	LaFayette, Ind.	F. Loop	3,002	.....	66	23	4	7/1	100.00
Ball Memorial Hospital*‡	Muncie, Ind.	W. C. Moore	3,691	.....	84	54	4	7/1	100.00
Iowa Methodist Hospital*‡	Des Moines, Iowa	J. B. Priestley	2,252	.....	61	39	4	7/1	75.00
University Hospitals*‡	Iowa City	N. Womack	3,459	3,512	106	65	23	7/1	50.00
St. Margaret's Hospital*	Kansas City, Kan.	M. V. Laing	2,088	.....	24	13	3	7/1	50.00
University of Kansas Medical Center*‡	Kansas City, Kan.	T. G. Orr	953	8,374	50	31	5	7	.....
St. Francis Hospital*	Wichita, Kan.	W. J. Biermann	3,466	.....	61	21	5	7/1	125.00
Wesley Hospital*‡	Wichita, Kan.	L. K. Crumpacker	1,505	.....	18	9	4	2	100.00
St. Joseph's Hospital*	Lexington, Ky.	F. W. Rankin	2,519	75	68	33	6	7/1	.....
Louisville General Hospital*	Louisville, Ky.	R. A. Griswold	1,193	14,137	88	38	19	7/1	45.00
Norton Memorial Infirmary*	Louisville, Ky.	R. A. Griswold	4,010	.....	46	22	4	7/1	75.00
St. Joseph Infirmary*	Louisville, Ky.	I. Abell	2,343	2,909	77	41	8	7/1	75.00
Charity Hospital of Louisiana*‡	New Orleans		7,245	61,749	394	99	31	7/1	25.00
Hotel Dieu, Sisters' Hospital*‡	New Orleans	J. A. Danna	2,397	.....	40	21	5	7/1	100.00
Ochsner Foundation Hospital*‡	New Orleans	A. Ochsner	1,273	10,771	35	30	21	Varies	150.00
†Southern Baptist Hospital*‡	New Orleans	J. F. Oakley	2,132	.....	6	..	2	7/1	150.00
Touro Infirmary*	New Orleans	J. D. Rives	3,193	7,032	56	27	5	.....	17.50
Shreveport Charity Hospital*	Shreveport, La.	J. E. Heard	1,985	5,795	73	35	7	7/1	60.00
Maine General Hospital*	Portland, Me.	I. M. Webber	1,627	2,601	55	18	6	.....	50.00
Baltimore City Hospitals*‡	Baltimore	O. C. Brantigan	2,641	5,369	196	78	10	7/1	15.00
Bon Secours Hospital*	Baltimore	G. Stewart	1,099	827	10	1	2	7/1	75.00
Church Home and Hospital*‡	Baltimore	T. S. Cullen	3,291	932	45	32	5	7/1	35.00
Franklin Square Hospital*‡	Baltimore	H. E. Wilgis	2,409	2,897	92	17	6	7/1	85.00
Hospital for Women*‡	Baltimore	W. Rienhoff	820	1,534	7	1	5	7/1	85.00
Johns Hopkins Hospital*‡	Baltimore	A. Blalock	3,651	51,156	103	70	11	7/1	15.00
Maryland General Hospital*‡	Baltimore	R. F. Chenowith	2,782	2,267	88	23	7	7/11	50.00
Mercy Hospital*	Baltimore	W. D. Wise	2,753	4,729	80	28	5	7/1	50.00
Provident Hospital and Free Dispensary*‡	Baltimore	S. McLanahan	.....	.....	63	11	5	.....	.....
St. Agnes Hospital*	Baltimore	G. A. Stewart	1,323	331	31	15	5	.....	.....
St. Joseph's Hospital*	Baltimore	W. B. Geraghty	2,261	3,633	64	20	5	7/1	50.00
Sinai Hospital*‡	Baltimore	H. M. Kern	2,477	.....	40	26	6	7/1	25.00
South Baltimore General Hospital*‡	Baltimore	O. S. Lloyd	2,256	7,576	66	22	7	7/1	75.00
Union Memorial Hospital*	Baltimore	J. M. T. Finney, Jr.	3,463	5,170	79	44	9	.....	.....
University Hospital*‡	Baltimore	C. R. Edwards	2,533	11,540	73	25	11	7/1	.....
West Baltimore General Hospital*	Baltimore	W. E. Gilmore	1,353	1,544	..	..	4	.....	.....
Suburban Hospital	Bethesda, Md.	A. L. Riddick	1,463	672	20	10	1	7/1	100.00
Beth Israel Hospital*‡	Boston	J. Fine	3,054	9,731	62	42	7	7/1	79.16
Beverly Hospital*	Boston	P. P. Johnson	2,188	5,386	45	35	5	.....	50.00
Boston City Hospital*‡	Boston	S. Fraser	10,428	46,694	463	81	10	.....	.....
Carney Hospital*	Boston		2,029	7,497	67	33	5	7	.....
Children's Hospital*‡	Boston	R. Gross	2,299	11,827	42	29	5	.....	.....
Lahey Clinic	Boston		.....	.....	..	..	18	.....	.....
Massachusetts General Hospital*	Boston	E. D. Churchill	2,863	.....	90	57	35	.....	.....
Massachusetts Memorial Hospitals*‡	Boston	R. H. Smithwick	4,485	2,333	32	22	7	7/1	50.00
New England Hospital for Women and Children*‡	Boston	G. E. Rochford	1,403	1,727	15	9	4	1/1	50.00
Peter Bent Brigham Hospital*	Boston	F. D. Moore	2,959	25,581	86	53	10	.....	.....
St. Elizabeth's Hospital*	Boston	J. W. Speltman	1,706	3,196	46	14	5	.....	.....
Cambridge City Hospital*	Cambridge, Mass.	H. E. Goden	1,433	6,810	62	21	2	7/1	58.33
Mount Auburn Hospital*‡	Cambridge, Mass.	S. Fraser	1,686	1,553	9	3	2	7/1	50.00
Truesdale Hospital*‡	Fall River, Mass.		2,212	842	38	21	4	.....	.....
†Lynn Hospital*	Lynn, Mass.		.....	.....	..	..	1	.....	.....
†Malden Hospital	Malden, Mass.	W. E. Garrey	3,391	.....	54	28	3	7/1	50.00
Newton-Wellesley Hospital*‡	Newton, Mass.	R. I. Smith	2,995	1,849	64	38	3	7/1	100.00
Cooley Dickinson Hospital‡	Northampton, Mass.	T. F. Corriden	3,653	.....	50	10	1	7/1	50.00
Quincy City Hospital*	Quincy, Mass.	A. L. Hanrahan	2,037	.....	65	26	3	.....	100.00
Salem Hospital*	Salem, Mass.	W. G. Phippen	2,530	1,869	53	13	1	.....	50.00
Memorial Hospital*‡	Worcester, Mass.	D. B. Alton	3,242	879	60	33	7	7/1	100.00
St. Vincent Hospital*	Worcester, Mass.	W. F. Lynch	2,465	.....	47	23	7	7/1	41.67
Worcester City Hospital*‡	Worcester, Mass.	B. F. Andrews	.....	.....	..	..	2	5/1	50.00
St. Joseph's Mercy Hospital*	Ann Arbor, Mich.	H. Beebe and F. A. Culler	1,480	.....	29	17	4	7/1	125.00
University Hospital*‡	Ann Arbor, Mich.	F. A. Culler	2,305	14,966	101	61	44	7/1	111.80
Leila Y. Post Montgomery Hospital*‡	Battle Creek, Mich.	R. L. Mustard	984	4,819	14	3	7	.....	150.00
Alexander Blain Hospital	Detroit		950	12,171	30	14	11	7	100.00
Charles Godwin Jennings Hospital*	Detroit	J. B. Hartzell	859	.....	4	1	2	7/1	250.00
City of Detroit Receiving Hospital*‡	Detroit	C. G. Johnston	3,571	17,267	263	126	19	7/1	188.00
Evangelical Deaconess Hospital*‡	Detroit	E. C. Baumgarten	4,023	90	31	9	3	7/1	150.00
Grace Hospital*	Detroit	C. S. Kennedy	7,290	2,933	58	34	16	7/1	75.00
Harper Hospital*‡	Detroit	W. D. Bardett	4,085	3,786	75	30	24	7/1	.....
Henry Ford Hospital*‡	Detroit	R. D. McClure	7,936	125,263	143	67	29	7/1	200.00
Mount Carmel Mercy Hospital*‡	Detroit	J. Garlepy	3,110	.....	100	30	6	7/1	150.00
Providence Hospital*	Detroit	R. C. Andries	5,419	.....	106	65	10	7/1	140.00
St. Mary's Hospital*	Detroit	G. K. Glasgow	2,224	.....	29	12	5	7/1	125.00
Woman's Hospital*‡	Detroit	W. E. Johnstone	2,595	.....	35	16	1	7/1	125.00
Wayne County General Hospital and Infirmary*‡	Eloise, Mich.	R. V. Walker	3,339	8,164	154	40	8	7/1	235.00
Hurley Hospital*	Flint, Mich.	A. H. Kretchmar	2,995	.....	88	27	6	7/1	135.00
Blodgett Memorial Hospital*‡	Grand Rapids, Mich.	W. R. Torgerson	1,538	.....	34	22	3	7	100.00
Butterworth Hospital*‡	Grand Rapids, Mich.	J. C. Foshee	2,289	344	61	32	5	7/1	100.00
St. Mary's Hospital*	Grand Rapids, Mich.	J. W. Logie	3,533	905	100	37	4	Varies	125.00
Highland Park General Hospital*‡	Highland Park, Mich.		1,398	.....	23	11	3	.....	.....
Bronson Methodist Hospital*‡	Kalamazoo, Mich.	M. Peelen	2,160	2,184	59	31	3	7/1	150.00
Pontiac General Hospital*‡	Pontiac, Mich.	C. G. Burke	.....	.....	..	..	5	7/1	75.00
Saginaw General Hospital*	Saginaw, Mich.	H. M. Bishop	1,314	1,683	22	10	3	7/1	75.00
St. Luke's Hospital*	Duluth, Minn.		.....	.....	..	..	1	.....	.....

Numerical and other references will be found on page 225.

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25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
St. Mary's Hospital*	Duluth, Minn.	A. J. Bianco	2,328	.....	48	38	1	7/1	$100.00
Asbury Hospital*[1]	Minneapolis		.....	.....	..	..	..	.....	.....
Lutheran Deaconess Home and Hospital*	Minneapolis	G. S. Bergh	858	.....	12	10	2	7/1	175.00
Minneapolis General Hospital*[1]	Minneapolis	A. A. Zierold	945	6,251	98	52	11	1/1, 7/1	115.00
Northwestern Hospital*	Minneapolis	O. Yoerg	4,527	.....	23	13	2	7/1	150.00
†St. Barnabas Hospital*[1]	Minneapolis		1,474	.....	17	15	2	.....	.....
Swedish Hospital*	Minneapolis	H. G. Scott	8,296	644	..	..	3	.....	.....
University of Minnesota Hospitals*[1]	Minneapolis	O. H. Wangensteen	1,222	7,761	90	70	31	.....	.....
Mayo Foundation	Rochester, Minn.	J. T. Priestly	.....	.....	..	..	100	.....	90.50
Ancker Hospital*	St. Paul	E. M. Jones	1,963	8,802	150	104	5	1/1	91.50
Charles T. Miller Hospital*[1,34]	St. Paul	H. B. Zimmermann	2,162	2,219	37	6	2	.....	115.00
Mercy Hospital-Street Memorial*[1]	Vicksburg, Miss.	A. Street	1,431	8,000	12	4	2	7	150.00
Vicksburg Hospital	Vicksburg, Miss.	W. H. Parsons	.....	.....	..	..	3	.....	50.00
St. Louis County Hospital*	Clayton, Mo.	L. A. Will	1,248	7,375	73	49	5	7/1	80.00
Ellis Fischel State Cancer Hospital[1]	Columbia, Mo.	J. J. Modlin	.....	.....	..	..	2	7/1	100.00
Kansas City General Hospital No. 1*	Kansas City, Mo.	C. B. Schutz	1,302	4,451	97	38	10	7/1	50.00
Menorah Hospital*	Kansas City, Mo.	O. J. Printz	1,381	.....	16	10	2	.....	200.00
Research Hospital*[1]	Kansas City, Mo.	C. J. Hunt	1,448	547	38	21	2	7/1	100.00
St. Joseph Hospital*	Kansas City, Mo.		6,830	.....	82	56	3	.....	.....
St. Luke's Hospital*[1]	Kansas City, Mo.	L. P. Engel and C. B. Schutz	2,439	.....	19	..	1	.....	.....
St. Mary's Hospital*[1]	Kansas City, Mo.	J. E. Castles	3,055	.....	40	22	2	7/1	125.00
Barnes Hospital*	St. Louis	E. A. Graham	2,074	8,536	68	55	44	7/1	25.00
De Paul Hospital*	St. Louis	H. A. Hassett	2,093	58	57	14	3	7/1	90.00
Homer G. Phillips Hospital*[1]	St. Louis	R. Elman	2,207	7,018	90	18	8	7/1	95.00
Jewish Hospital*[1]	St. Louis		2,430	.....	60	29	4	7	50.00
Missouri Baptist Hospital*	St. Louis	G. F. Rendleman	2,042	.....	..	..	6	7/1	70.00
Missouri Pacific Hospital	St. Louis	O. B. Zobrist	.....	.....	..	..	4	.....	.....
St. Anthony's Hospital*	St. Louis	F. Tainter	3,433	1,752	47	19	1	7/1	125.00
St. John's Hospital*	St. Louis	W. P. Glennon	2,863	999	77	27	3	7/1	60.00
St. Louis City Hospital*[1]	St. Louis	E. Graham, Stewart, and Kieffer	3,576	7,445	201	89	15	7/1	95.00
St. Luke's Hospital*[1]	St. Louis	L. H. Jorstad	2,318	.....	..	..	3	7/1	50.00
St. Mary's Group of Hospitals*	St. Louis	J. W. Stewart	2,852	9,633	101	51	7	7/1	35.00
Montana Deaconess Hospital*	Great Falls, Mont.	L. L. Howard	2,281	650	53	33	2	.....	200.00
Bishop Clarkson Memorial Hospital*	Omaha		.....	.....	..	..	1	.....	.....
Creighton Memorial St. Joseph's Hospital*[1]	Omaha	C. McMartin	3,807	.....	61	35	1	7/1	100.00
Nebraska Methodist Hospital*[1]	Omaha	C. McLaughlin	810	.....	12	11	1	.....	100.00
University of Nebraska Hospitals*[1]	Omaha	J. J. Keegan	474	680	20	18	9	7/1	75.00
Atlantic City Hospital*	Atlantic City, N. J.	D. B. Allman	2,258	19,609	77	14	1	.....	.....
Cooper Hospital*	Camden, N. J.	I. E. Delbert	2,405	4,274	116	69	3	7/1	83.33
West Jersey Hospital*	Camden, N. J.	H. W. Jack	.....	.....	..	..	3	7/1	125.00
Hackensack Hospital*[1]	Hackensack, N. J.	A. I. Mader, Jr.	2,374	8,090	86	..	3	7/1	100.00
Jersey City Hospital*[1]	Jersey City, N. J.	E. Burke	3,213	17,084	143	25	4	.....	.....
Mountainside Hospital*[1]	Montclair, N. J.	V. B. Seidler	3,786	3,414	84	31	2	7/1	97.50
Burlington County Hospital	Mount Holly, N. J.	T. J. Summey	1,080	2,212	24	..	2	7/1	100.00
Fitkin Memorial Hospital*	Neptune, N. J.	O. K. Parry	2,228	3,451	41	14	3	7/1	150.00
Hospital of St. Barnabas and for Women and Children*	Newark, N. J.		.....	.....	..	..	3	.....	.....
Newark Beth Israel Hospital*	Newark, N. J.	C. Robbins	3,072	1,253	77	29	3	7/1	25.00
Presbyterian Hospital[1]	Newark, N. J.	E. W. Sprague	4,328	128	65	17	4	1/1	200.00
Paterson General Hospital*	Paterson, N. J.		2,769	1,282	96	26	1	.....	.....
†St. Francis Hospital*	Trenton, N. J.		4,976	1,867	105	21	2	10/1, 7/1	100.00
Albany Hospital*[1]	Albany, N. Y.	E. H. Campbell	2,333	3,005	68	34	5	7/1	41.67
Binghamton City Hospital*	Binghamton, N. Y.	C. I. Pope	2,093	.....	67	33	7	7/1	60.00
Brooklyn Cancer Institute	Brooklyn		.....	.....	..	..	..	.....	.....
Brooklyn Hospital*[1]	Brooklyn	W. H. Field	2,598	5,471	..	..	3	7/1	25.00
Coney Island Hospital*[1]	Brooklyn	J. E. Hammett	2,294	15,024	119	23	5	1/1, 7/1	80.00
Cumberland Hospital*[1]	Brooklyn	J. J. Gainey	2,617	14,818	85	7	3	7/1	70.00
Greenpoint Hospital*[1]	Brooklyn	J. Smith, Jr.	1,368	10,431	71	17	2	7/1	130.00
Jewish Hospital*[1]	Brooklyn		2,744	2,664	39	12	4	8	30.00
Kings County Hospital*[1]	Brooklyn	J. Tenopyr and B. Cissel	1,025	43,339	630	113	8	1/1, 7/1	130.00
Long Island College Hospital*[1]	Brooklyn	E. J. Browder	2,494	9,388	45	9	4	7/1	25.00
Maimonides Hospital, Beth Moses Division*[1]	Brooklyn	I. E. Siris and H. M. Rabinowitz	1,092	1,944	59	18	2	7/1	75.00
Methodist Hospital*[1]	Brooklyn	S. Clark and A. Renaud	2,271	5,463	62	26	5	7/1	.....
Norwegian Lutheran Deaconesses' Home and Hospital*[1]	Brooklyn	R. Tate	1,573	2,640	42	..	22	7/1	35.00
St. Catherine's Hospital*[1]	Brooklyn		3,265	4,642	42	13	3	7/1	75.00
St. John's Hospital*[1]	Brooklyn	M. N. Foote	1,622	.....	49	20	3	7/1	95.00
St. Mary's Hospital*	Brooklyn	T. M. Brennan	1,139	3,325	41	12	1	7/1	60.00
Buffalo General Hospital*	Buffalo	J. R. Paine	2,714	2,321	86	34	10	7/1	25.00
Children's Hospital*	Buffalo	W. L. Machemer	673	.....	6	..	2	.....	50.00
Deaconess Hospital*	Buffalo		4,686	1,474	87	27	9	7/1	60.00
Edward J. Meyer Memorial Hospital*[1]	Buffalo	J. D. Stewart	1,246	2,766	111	56	12	7/1	100.00
Millard Fillmore Hospital*	Buffalo	H. N. Kenwell	2,316	.....	53	29	7	7/1	50.00
Sisters of Charity*	Buffalo	J. C. Brady	2,324	.....	79	24	2	7/1	150.00
Mary McClellan Hospital	Cambridge, N. Y.		962	4,403	22	7	1	7/1	.....
Clifton Springs Sanitarium and Clinic[1]	Clifton Springs, N. Y.	W. C. Eikner	986	3,334	30	19	2	.....	.....
Mary Imogene Bassett Hospital*[1]	Cooperstown, N. Y.	M. A. McIver	722	5,849	22	15	2	7/1	83.33
Meadowbrook Hospital*	Hempstead, N. Y.	A. S. Warriner	971	.....	67	41	2	1, 7	115.00
Jamaica Hospital*[1]	Jamaica, N. Y.	J. D. Hallinan	3,522	8,065	37	24	2	7/1	175.00
Mary Immaculate Hospital*[1]	Jamaica, N. Y.		10,522	4,629	66	9	2	7/1	75.00
Queens General Hospital*[1]	Jamaica, N. Y.	C. L. Davidson	2,965	19,505	307	134	4	7/1	80.00
Charles S. Wilson Memorial Hospital*[1]	Johnson City, N. Y.	F. G. Moore	3,560	.....	37	14	6	7/1	.....
Nassau Hospital*[1]	Mineola, N. Y.		2,164	.....	9	..	1	.....	.....
†Mount Vernon Hospital*	Mount Vernon, N. Y.	N. W. Cornell	1,751	548	51	18	2	7/1	125.00
New Rochelle Hospital*	New Rochelle, N. Y.	G. C. Adie	2,270	2,043	70	24	4	.....	.....
Bellevue Hospital	New York City		10,149	38,501	360	125	29	.....	95.00
Div. I—Columbia University*[1]	New York City	F. Berry	.....	.....	..	..	..	.....	.....
Div. II—Cornell University*[1]	New York City	C. S. Dudley	.....	.....	..	..	..	.....	.....
Div. III—New York University*[1]	New York City	J. Mulholland	.....	.....	..	..	..	.....	.....
Div. IV—Open Division*[1]	New York City	A. McQuillan	.....	.....	..	..	..	.....	.....
Beth Israel Hospital*[1]	New York City	L. Ginzburg	1,714	3,471	33	12	3	7/1	50.00
Bronx Hospital*[1]	New York City	J. A. Landy	4,240	16,459	82	23	5	7/1	75.00

Numerical and other references will be found on page 225.

25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Assoc. Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
Flower and Fifth Avenue Hospitals*[1]	New York City	J. M. Winfield	1,991	4,437	35	7	10	7/1	.....
Fordham Hospital*[1]	New York City	L. Marton and A. B. Sullivan	3,776	7,027	276	50	6	7/1	$ 80.00
†French Hospital*	New York City		4,891	13,743	..	..	3	.....	30.00
Gouverneur Hospital*[1]	New York City	F. J. McGowan	774	9,661	58	10	3	7/1	80.00
Harlem Hospital*[1]	New York City	L. T. Wright	3,757	21,157	305	29	11	1, 7	80.00
Hospital for Special Surgery	New York City	F. Beckman	1,576	2,928	11	5	4	Varies	50.00
Knickerbocker Hospital*	New York City	R. H. Patterson	.....	.....	..	..	6	7/1	110.00
Lenox Hill Hospital*[1]	New York City	O. Pickhardt and F. M. Donohue	2,333	.....	78	26	6	Varies	50.00
†Lincoln Hospital*[1]	New York City	F. H. Amendola	4,764	18,467	205	42	8	.....	.....
Metropolitan Hospital*[1]	New York City	J. M. Winfield	2,281	6,150	104	29	3	7/1	80.00
Montefiore Hospital for Chronic Diseases*[1]	New York City	S. Standard	692	.....	64	30	3	7/1	80.00
Morrisania City Hospital*[1]	New York City	G. Milani and P. Daly	916	4,339	63	25	3	7/1	80.00
Mount Sinai Hospital*[1]	New York City	R. Colp and J. H. Garlock	.....	.....	..	..	21	Varies	50.00
New York City Hospital*[1]	New York City	I. Kross	2,435	9,588	124	22	4	7/1	80.00
New York Hospital*[1]	New York City	F. Glenn	7,902	41,022	108	58	23	7/1	25.00
New York Infirmary*[1]	New York City	A. Hubert	628	1,785	3	1	2	.....	.....
New York Polyclinic Medical School and Hospital*	New York City		1,861	.....	24	7	12	7/1	50.00
Presbyterian Hospital*[1]	New York City	G. H. Humphreys	3,219	56,177	126	..	21	.....	41.66
Roosevelt Hospital*[1]	New York City	H. W. Lawe and W. C. White	3,775	9,116	95	33	14	7/1	70.00
St. Clare's Hospital*[1]	New York City	W. V. Healey	4,700	8,602	78	36	5	7/1	25.00
St. Luke's Hospital*	New York City	W. F. MacFee	3,501	13,465	101	46	13	7	50.00
St. Vincent's Hospital*[1]	New York City	L. M. Rousselot	3,652	11,287	134	52	11	7/1	50.00
†Sydenham Hospital*[1]	New York City	J. B. Stenbuck	1,134	3,484	33	8	2	7	35.00
University Hospital*	New York City	J. W. Hinton	3,781	18,079	113	47	20	.....	30.00
Genesee Hospital*[1]	Rochester, N. Y.	S. J. Stabins	1,974	1,275	68	38	8	7	41.66
Highland Hospital*[1]	Rochester, N. Y.	W. A. Callahan	.....	.....	..	..	4	.....	100.00
Rochester General Hospital*[1]	Rochester, N. Y.	W. A. Fenstermacher	5,755	8,038	48	31	7	7/1	70.00
St. Mary's Hospital*[1]	Rochester, N. Y.	L. Simpson	6,428	5,088	62	28	6	7/1	125.00
Strong Memorial—Rochester Municipal Hospitals*[1]	Rochester, N. Y.	J. J. Morton	2,288	11,481	139	109	17	7/1	45.00
†Ellis Hospital*[1]	Schenectady, N. Y.	S. F. MacMillan	4,217	.....	39	23	3	.....	100.00
Hospital of the Good Shepherd*[1]	Syracuse, N. Y.	A. Rafft	3,142	.....	64	42	3	.....	125.00
Grasslands Hospital*[1]	Valhalla, N. Y.	G. C. Adie	470	5,725	46	29	4	7	125.00
†White Plains Hospital*	White Plains, N. Y.	E. G. Ramsdell	.....	.....	..	..	2	7/1	75.00
Charlotte Memorial Hospital*	Charlotte, N. C.	T. D. Sparrow	1,681	7,054	39	22	3	7/1	60.00
Duke Hospital*[1]	Durham, N. C.	D. Hart	2,019	9,663	29	15	20	7/1	83.33
Watts Hospital*	Durham, N. C.		2,831	15,535	41	19	5	7/1	50.00
Rutherford Hospital	Rutherfordton, N. C.		1,000	4,335	5	..	1	.....	.....
James Walker Memorial Hospital*[1]	Wilmington, N. C.		4,600	8,798	72	26	2	.....	.....
City Memorial Hospital*[1]	Winston-Salem, N. C.		2,456	2,938	33	4	3	.....	.....
Kate Bitting Reynolds Memorial Hospital*	Winston-Salem, N. C.	J. F. Marshall	1,483	11,655	19	10	3	7	75.00
North Carolina Baptist Hospital*[1]	Winston-Salem, N. C.	H. H. Bradshaw	1,531	6,417	55	42	12	7/1	.....
Bismarck Evangelical Hospital	Bismarck, N. D.		1,424	115,000	9	3	1	.....	115.00
St. Luke's Hospital*	Fargo, N. D.	V. G. Borland	.....	.....	..	..	1	.....	100.00
Trinity Hospital*	Minot, N. D.		1,165	3,948	..	..	1	.....	.....
Children's Hospital	Akron, Ohio	S. A. Schleuter	63	.....	..	..	1	7/1	100.00
City Hospital*	Akron, Ohio		2,742	435	147	66	10	7/1	100.00
Peoples Hospital*[1]	Akron, Ohio	R. T. Allison, Jr.	1,557	752	28	13	9	7/1	100.00
St. Thomas Hospital*	Akron, Ohio	E. J. Kraker	.....	.....	..	..	5	7	125.00
Aultman Hospital*[1]	Canton, Ohio	L. L. Lawrence	3,357	77	97	42	8	7/1	75.00
Mercy Hospital*	Canton, Ohio	A. W. Warren	4,524	71	80	23	8	7/1	100.00
Christ Hospital*	Cincinnati	P. W. Sutton	2,822	1,941	109	38	4	7/1	75.00
Cincinnati General Hospital*[1]	Cincinnati	B. N. Carter	3,358	21,042	355	154	24	9/1	.....
Deaconess Hospital*	Cincinnati		2,836	.....	37	9	1	7/1	100.00
Good Samaritan Hospital*	Cincinnati	J. J. Maloney	7,921	1,308	99	45	8	.....	75.00
Jewish Hospital*	Cincinnati	J. D. Heiman	3,711	.....	46	29	8	7/1	60.00
St. Mary's Hospital*	Cincinnati	H. Brinker	1,350	5,022	33	26	3	7/1	105.00
City Hospital*[1]	Cleveland	C. H. Lenhart	2,467	12,751	255	82	18	7/1	60.00
Cleveland Clinic Hospital †	Cleveland	T. E. Jones	2,675	19,285	59	23	13	7/1	100.00
Fairview Park Hospital*	Cleveland	W. E. Smith	1,066	325	31	11	4	7/1	75.00
Lutheran Hospital †	Cleveland	F. S. Gibson	2,821	.....	53	31	7	7/1	75.00
Mount Sinai Hospital*	Cleveland	S. O. Freelander	1,170	1,617	37	17	6	7/1	65.00
St. Alexis Hospital*[1]	Cleveland	F. A. Spittler	6,409	2,027	83	27	6	7/1	75.00
St. John's Hospital*	Cleveland	J. E. Hannibal	1,858	114	19	8	4	7/1	.....
St. Luke's Hospital*	Cleveland	J. Bloyer	2,971	2,846	80	29	4	6/25	67.00
St. Vincent Charity Hospital*	Cleveland	H. B. Wright	1,723	14,046	19	14	9	.....	75.00
University Hospitals*[1]	Cleveland	C. H. Lenhart	4,515	9,606	154	..	16	7/1	25.00
Mount Carmel Hospital*[1]	Columbus, Ohio	W. H. Teachnor	3,141	748	68	19	1	7/1	110.00
Ohio State University Hospital*	Columbus, Ohio	R. M. Zollinger	1,639	5,442	102	67	18	7/1	50.00
St. Francis Hospital*	Columbus, Ohio	L. B. Harris	1,928	.....	83	39	3	.....	.....
†White Cross Hospital*	Columbus, Ohio	K. P. Klassen	2,257	212	47	16	5	7	100.00
Miami Valley Hospital*	Dayton, Ohio	M. T. Hoerner	2,714	.....	97	49	4	7/1	75.00
Huron Road Hospital*[1]	East Cleveland, Ohio	H. W. Brown	2,248	368	49	25	7	7/1	80.00
Mercy Hospital*[1]	Hamilton, Ohio	R. F. Antonelle	688	316	..	..	3	.....	.....
Lakewood Hospital*	Lakewood, Ohio	N. W. Thiessen	3,051	487	59	31	3	7/1	100.00
Maumee Valley Hospital*	Toledo, Ohio		696	1,126	66	42	4	.....	125.00
Mercy Hospital*	Toledo, Ohio	H. Heath	5,425	157	62	28	4	7/1	110.00
St. Vincent's Hospital*[1]	Toledo, Ohio	F. M. Douglass	4,514	702	88	44	3	7	100.00
St. Elizabeth's Hospital*[1]	Youngstown, Ohio	F. W. McNamara	1,745	514	25	12	6	7/1	125.00
Youngstown Hospital*	Youngstown, Ohio	A. E. Brant	3,235	885	76	30	8	7/1	100.00
St. Anthony Hospital*	Oklahoma City	L. J. Starry	2,208	840	47	20	3	7/1	75.00
University Hospitals*	Oklahoma City	L. J. Starry	718	3,526	26	13	3	7/1	35.00
Hillcrest Memorial Hospital*[1]	Tulsa, Okla	A. B. Carney	3,309	.....	78	30	3	.....	.....
St. John's Hospital*[1]	Tulsa, Okla	D. L. Garrett	4,831	.....	56	22	4	.....	150.00
Emanuel Hospital*[1]	Portland, Ore	O. M. Nisbet	1,294	.....	10	7	3	7/1	75.00
Good Samaritan Hospital*	Portland, Ore	K. H. Martzloff	1,898	.....	29	10	1	7/1	75.00
†Portland Sanitarium and Hospital*	Portland, Ore		.....	.....	..	..	1	.....	.....
Providence Hospital*	Portland, Ore	L. P. Gambee	3,362	2,864	86	38	3	7/1	75.00
St. Vincent's Hospital*	Portland, Ore		.....	.....	..	..	3	.....	.....
University of Oregon Medical School Hospitals and Clinics*[1]	Portland, Ore	W. K. Livingston	1,185	5,404	97	74	6	7/1	75.00

Numerical and other references will be found on page 225.

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25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1940)	Beginning Stipend (Month)
Abington Memorial Hospital*	Abington, Pa.	D. A. Pfeiffer	2,644	2,550	96	57	4	7/1	$ 50.00
Allentown Hospital*[1]	Allentown, Pa.	R. L. Schaeffer	2,572	2,979	29	9	3	7/1	100.00
Sacred Heart Hospital*	Allentown, Pa.	W. A. Hausman	4,219	9,391	126	53	3	7/1	150.00
St. Luke's Hospital*[1]	Bethlehem, Pa.	W. L. Estes, Jr.	3,137	266	100	..	3	7/1	100.00
Bradford Hospital	Bradford, Pa.	C. Smith	2,159	8,749	19	7	2	.....	.....
Bryn Mawr Hospital*	Bryn Mawr, Pa.	A. E. Billings	557	.....	28	16	2	7/1, 8/1	75.00
George F. Geisinger Memorial Hospital*	Danville, Pa.	H. L. Foss	2,342	18,193	55	24	4	.....	75.00
Hamot Hospital*[1]	Erie, Pa.	A. F. Jonas	2,178	1,718	58	23	3	7/1	150.00
St. Vincent's Hospital*	Erie, Pa.	L. A. Lasher	3,753	823	45	19	2	7/1	50.00
†Harrisburg Hospital*[1]	Harrisburg, Pa.	.....	...	.....	..	..	..	.....	.....
St. Joseph's Hospital*	Lancaster, Pa.	J. L. Atlee, Jr.	1,701	5,145	51	30	3	7/1	150.00
Episcopal Hospital*[1]	Philadelphia	I. M. Boykin and E. T. Crossan	2,731	13,483	82	34	4	7/1	50.00
Frankford Hospital*[1]	Philadelphia	B. H. Chandlee and R. W. Lorry	1,392	.....	48	..	15	7/1	100.00
Germantown Dispensary and Hospital*	Philadelphia	S. D. Weeder	2,325	5,749	76	24	2	7	50.00
Graduate Hospital of the University of Pennsylvania*	Philadelphia	.....	1,697	10,188	54	26	6	7/1	.....
Hahnemann Hospital*[1]	Philadelphia	W. L. Martin	4,068	11,829	187	146	6	.....	25.00
Hospital of the University of Pennsylvania*[1]	Philadelphia	I. S. Ravdin	3,745	20,059	74	69	18	Varies	100.00
Hospital of the Woman's Medical College of Pennsylvania*[1]	Philadelphia	L. K. Ferguson	1,073	9,924	14	4	2	7/1	60.00
Jefferson Medical College Hospital*	Philadelphia	.....	3,222	8,827	172	73	21	7/1	.....
Jewish Hospital*[1]	Philadelphia	.....	2,710	1,987	130	64	5	7	50.00
Lankenau Hospital*	Philadelphia	J. M. Deaver and G. C. Engel	2,860	.....	70	36	6	7/1	50.00
Mount Sinai Hospital*[1]	Philadelphia	B. Lipshutz and L. Kaplan	1,840	11,874	46	31	2	6/21	50.00
Pennsylvania Hospital*	Philadelphia	J. B. Flick	1,895	10,444	69	41	6	.....	29.00
Philadelphia General Hospital*[1]	Philadelphia	.....	4,497	.....	482	..	15	7/1	70.00
Presbyterian Hospital*	Philadelphia	T. E. Orr	.....	.....	..	..	3	.....	25.00
St. Luke's Hospital and Children's Medical Center*[1]	Philadelphia	.....	.....	.....	..	..	..	.....	.....
Temple University Hospital*[1]	Philadelphia	W. E. Burnett	2,440	2,029	77	42	6	7/1	.....
Woman's Hospital*[1]	Philadelphia	C. M. Smyth	833	1,638	11	7	1	9/1	50.00
Allegheny General Hospital*	Pittsburgh	J. C. Burt	426	320	16	3	2	7/1	100.00
Children's Hospital [1]	Pittsburgh	Meredith and Foster	1,148	1,950	..	..	1	.....	45.00
Mercy Hospital*[1]	Pittsburgh	H. H. Donaldson	4,179	6,130	51	19	4	9/1	100.00
Montefiore Hospital*	Pittsburgh	.....	1,508	1,718	40	19	3	7/1	50.00
Pittsburgh Hospital*[1]	Pittsburgh	J. D. Singley	1,867	2,605	54	7	1	9/1	100.00
Presbyterian Hospital*[1]	Pittsburgh	E. W. Meredith	1,431	.....	27	13	12	.....	41.67
St. Francis Hospital*[1]	Pittsburgh	.....	2,744	246	77	8	3	7/1	100.00
Western Pennsylvania Hospital*[1]	Pittsburgh	.....	5,886	1,875	104	45	3	10/1	.....
Reading Hospital*[1]	Reading, Pa.	W. A. Lebkicher	1,483	1,280	41	23	1	7/1	100.00
St. Joseph's Hospital*	Reading, Pa.	M. Z. Gearhart	840	.....	..	..	1	.....	.....
Robert Packer Hospital*	Sayre, Pa.	D. Guthrie	2,223	4,322	42	26	6	7/1	150.00
Washington Hospital*	Washington, Pa.	.....	...	.....	..	..	2	7/1	175.00
Mercy Hospital*[1]	Wilkes-Barre, Pa.	F. M. Puglese	1,982	1,191	17	7	2	7/1	100.00
Wilkes-Barre General Hospital*	Wilkes-Barre, Pa.	M. C. Rumbaugh	4,664	4,464	86	17	1	•9/1	100.00
Williamsport Hospital*[1]	Williamsport, Pa.	.....	1,711	.....	38	17	..	.....	.....
York Hospital*	York, Pa.	J. F. Bacon	1,952	761	94	34	3	7/1	100.00
Rhode Island Hospital*[1]	Providence, R. I.	W. P. Davis	4,452	6,438	183	79	6	1/1, 7/1	50.00
Roper Hospital*[1]	Charleston, S. C.	F. E. Kredel	2,059	3,221	49	26	5	7/1	25.00
Columbia Hospital*[1]	Columbia, S. C.	G. H. Bunch	2,382	7,460	77	32	5	7/1	75.00
Baroness Erlanger Hospital*[1]	Chattanooga, Tenn.	.....	...	6,675	7,215	174	48	.....	.....
Knoxville General Hospital*	Knoxville, Tenn.	C. O. Smeltzer	1,735	2,717	75	13	2	7/1	70.00
John Gaston Hospital*[1]	Memphis, Tenn.	J. H. McGehee	2,253	13,055	69	29	6	.....	.....
Methodist Hospital*[1]	Memphis, Tenn.	J. A. Crisler	1,974	.....	25	6	3	7/1	75.00
St. Joseph Hospital*[1]	Memphis, Tenn.	A. J. Grobmyer	1,638	471	13	5	3	7/1	.....
George W. Hubbard Hospital of Meharry Medical College*	Nashville, Tenn.	M. Walker	763	5,352	49	13	4	7/1	75.00
Nashville General Hospital*	Nashville, Tenn.	C. M. Miller	.....	.....	..	..	3	.....	.....
St. Thomas Hospital*	Nashville, Tenn.	L. W. Edwards	4,817	.....	74	29	9	7/1	75.00
Vanderbilt University Hospital*[1]	Nashville, Tenn.	B. Brooks	3,363	14,241	98	63	11	7/1	35.41
†Baylor University Hospital*[1]	Dallas, Texas	H. W. Cochran	1,685	3,106	30	12	6	7/1	50.00
Methodist Hospital*	Dallas, Texas	.....	1,385	571	40	15	4	7/1	75.00
Parkland Hospital*[1]	Dallas, Texas	L. Hudson	1,500	7,219	87	31	9	7/1	50.00
St. Paul's Hospital*	Dallas, Texas	O. W. Gibbons	937	950	12	6	6	7/1	100.00
Harris Hospital*[1]	Fort Worth, Texas	T. H. Thomason	1,209	1,100	16	7	2	7/1	100.00
University of Texas Medical Branch Hosps.*[1]	Galveston, Texas	R. M. Moore	878	4,632	49	35	14	7	50.00
Hermann Hospital*	Houston, Texas	C. W. Waldron	2,462	1,226	37	22	5	.....	50.00
Jefferson Davis Hospital*[1]	Houston, Texas	J. H. Wootters	1,430	5,420	85	29	4	7/1	50.00
Memorial Hospital	Houston, Texas	L. E. Williford	5,917	.....	72	19	6	.....	.....
Methodist Hospital*[1]	Houston, Texas	L. L. D. Tuttle	773	87	11	8	2	7/1	75.00
St. Joseph Infirmary*	Houston, Texas	J. P. Barnes	5,408	1,282	46	21	3	.....	150.00
Southern Pacific Hospital	Houston, Texas	J. R. Gandy	319	5,015	9	5	3	.....	125.00
Scott and White Hospital*	Temple, Texas	A. C. Scott and G. V. Brindley	3,746	.....	45	23	16	.....	150.00
Wichita Falls Clinic Hospital*	Wichita Falls, Texas	W. E. Crump	880	15,980	11	4	1	7/1	300.00
†Thomas D. Dee Memorial Hospital*	Ogden, Utah	.....	...	.....	..	..	..	.....	.....
Dr. W. H. Groves Latter-Day Saints Hosp.*[1]	Salt Lake City	L. J. Taufer	5,871	216	102	43	4	7/1	75.00
Holy Cross Hospital*	Salt Lake City	J. J. Galligan	2,083	.....	28	15	2	7/1	50.00
St. Mark's Hospital*[1]	Salt Lake City	M. O. Lindem	2,679	73	40	12	1	7/1	100.00
Salt Lake County General Hospital*[1]	Salt Lake City	P. B. Price	852	6,475	72	37	7	7/1	100.00
Bishop DeGoesbriand Hospital*[1]	Burlington, Vt.	A. A. Gladstone	756	110	7	3	1	7/1	100.00
Mary Fletcher Hospital*	Burlington, Vt.	A. G. Mackay	1,988	109	19	10	4	7/1	75.00
Alexandria Hospital*	Alexandria, Va.	C. L. Fifer	1,179	.....	24	9	2	7/1	100.00
Arlington Hospital*[1]	Arlington, Va.	J. T. Hazel	621	.....	13	8	2	.....	100.00
University of Virginia Hospital*[1]	Charlottesville, Va.	E. P. Lehman	2,531	8,389	69	23	8	7/1	.....
Chesapeake and Ohio Hospital	Clifton Forge, Va.	J. M. Emmett	3,103	4,634	21	11	3	7/1	60.00
De Paul Hospital*[1]	Norfolk, Va.	C. C. Smith	2,709	1,052	60	18	3	7/1	75.00
Norfolk General Hospital*	Norfolk, Va.	L. Gwathmey	1,845	.....	..	..	6	7/1	.....
Johnston-Willis Hospital*	Richmond, Va.	F. S. Johns	3,913	.....	86	19	4	7/1	50.00
Medical College of Virginia Hospital Division*[1]	Richmond, Va.	I. A. Bigger	2,903	5,384	123	52	18	7/1	46.50
Jefferson Hospital*	Roanoke, Va.	H. H. Trout	2,163	4,689	30	16	3	7/1	125.00
Doctors Hospital*	Seattle	E. B. Speir	3,648	.....	50	33	2	7/1	100.00
King County Hospital Unit No. 1 (Harborview)*	Seattle	H. N. Harkins	1,173	4,076	53	27	8	7/1	90.00
Providence Hospital*[1]	Seattle	R. L. Zech	1,514	322	118	55	2	7/1	75.00

Numerical and other references will be found on page 225.

25. SURGERY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
Swedish Hospital*	Seattle	R. L. Loe	1,749	.....	21	11	1	8/1	$100.00
Virginia Mason Hospital*	Seattle	J. W. Baker	3,781	.....	79	51	6	.....	75.00
St. Luke's Hospital*[1]	Spokane	C. P. Schlicke	995	129	63	50	1	.....	.....
Beckley Hospital	Beckley, W. Va.		2,346	15,877	39	15	4	.....	.....
Charleston General Hospital*[1]	Charleston, W. Va.	J. E. Cannaday and H. A. Bailey	2,305	2,755	28	9	2	7/1	100.00
Chesapeake and Ohio Hospital*	Huntington, W. Va.	R. J. Wilkinson	.....	.....	..	..	2	.....	.....
St. Mary's Hospital*	Huntington, W. Va.	J. R. Brown	1,759	3,264	42	15	4	7/1	100.00
Laird Memorial Hospital[1]	Montgomery, W. Va.	W. R. Laird	2,664	11,514	31	13	2	1/1	150.00
St. Joseph's Hospital*	Parkersburg, W. Va.	T. L. Harris	2,247	.....	57	21	2	7/1	150.00
Myers Clinic Hospital[1]	Phillippi, W. Va.	H. C. Myers	1,262	7,410	29	12	2	7/1	200.00
La Crosse Lutheran Hospital*[1]	La Crosse, Wis.	S. Gundersen	.....	.....	..	..	1	7	150.00
Madison General Hospital*	Madison, Wis.	H. L. Greene	1,214	.....	36	21	2	7/1	50.00
Methodist Hospital*	Madison, Wis.		.....	.....	..	..	..	.....	.....
St. Mary's Hospital*	Madison, Wis.	J. C. Dean	2,722	.....	51	21	1	7/1	100.00
State of Wisconsin General Hospital*[1]	Madison, Wis.	E. R. Schmidt	1,983	4,547	61	42	11	7	25.00
Columbia Hospital*	Milwaukee	F. Raine	1,013	.....	32	19	4	.....	.....
Evangelical Deaconess Hospital*	Milwaukee	P. M. Currer	2,553	.....	44	17	3	.....	150.00
Milwaukee Children's Hospital	Milwaukee	A. A. Schaefer	.....	.....	..	..	1	.....	.....
Milwaukee County Hospital*[1]	Milwaukee	C. F. Conroy	3,980	11,359	70	8	15	Varies	158.62
Milwaukee Hospital*	Milwaukee	T. S. O'Malley	6,708	.....	29	22	5	7	75.00
Mount Sinai Hospital*[1]	Milwaukee	J. B. Wilets	1,649	613	26	10	5	7/1	75.00
St. Joseph's Hospital*	Milwaukee	F. Stratton	4,725	.....	137	32	4	7	75.00
St. Luke's Hospital*[1]	Milwaukee	J. Garland	1,518	144	31	12	2	7	150.00
St. Mary's Hospital*	Milwaukee	D. Witte	1,670	.....	53	21	1	7/1	.....
Queen's Hospital*[1]	Honolulu, Hawaii	J. Strode	1,201	1,719	13	8	6	7	75.00

26. THORACIC SURGERY

Hospitals, 42; Assistant Residencies and Residencies, 165

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered *	Beginning of Service (1949)	Beginning Stipend (Month)
United States Army									
Fitzsimons General Hospital*	Denver	J. H. Forse	222	2,774	8	8	5	.....	n
Walter Reed General Hospital*	Washington, D. C.	F. E. Hamilton	813	5,382	18	16	16	1, 7	n
United States Navy									
U. S. Naval Hospital	Corona, Calif.	.....	.....	.....	..	..	2	.....	n
Veterans Administration									
†Veterans Admin. Hospital[1]	San Fernando, Calif.	H. W. Harrison	(Included in Pulmonary Diseases)				1	.....	n
†Veterans Admin. Hospital[1]	Van Nuys, Calif.	J. Weinberg	(Included in Pulmonary Diseases)				1	.....	n
†Veterans Admin. Hospital	Chamblee, Ga.	O. Abbott	200	60	17	11	1	7/1	n
Veterans Admin. Hospital	Hines, Ill.	C. B. Puestow	4,970	.....	95	61	52	1/1, 7/1	n
†Veterans Admin. Hospital[1]	Castle Point, N. Y.	R. Friedlander	438	.....	..	..	1	.....	n
Veterans Admin. Hospital	New York City	P. K. Sauer	154	165	10	8	3	1, 7	n
Veterans Admin. Hospital	Oteen, N. C.	J. D. Murphy	775	.....	9	85	4	7/1	n
†Veterans Admin. Hospital[1]	Brecksville, Ohio	E. B. Kay	(See Pulmonary Diseases)				1	.....	n
†Veterans Admin. Hospital	Memphis, Tenn.	F. A. Hughes	256	.....	13	9	3	7/1	n
†Veterans Admin. Hospital	Legion, Texas	C. S. Livingston	109	246	6	4	2	.....	n
Veterans Admin. Hospital[1]	McKinney, Texas	J. Carswell	.....	.....	..	..	2	.....	n
†Veterans Admin. Hospital[1]	Richmond, Va.	F. P. Coleman	332	.....	18	11	3	7/1	n
Nonfederal									
Highland-Alameda County Hospital*[1]	Oakland, Calif.	P. C. Sampson	.....	.....	..	..	1	.....	$100.00
Olive View Sanatorium[1]	Olive View, Calif.	J. Skillen	423	.....	..	..	4	.....	489.00
†National Jewish Hospital[1]	Denver, Colo.	J. Grow	.....	.....	..	..	1	.....	.....
Norwich State Tuberculosis Sanatorium (Uncas-on-Thames)	Norwich, Conn.		.....	.....	..	..	2	.....	.....
†University Hospital*	Augusta, Ga.	R. C. Major	774	239	25	22	4	7/1	250.00
City of Chicago Municipal Tuberculosis Hospital[1]	Chicago		610	.....	..	..	2	.....	.....
Boston Sanatorium	Boston	J. Strecker	.....	.....	..	..	2	.....	.....
University Hospital*[1]	Ann Arbor, Mich.	J. Alexander	653	1,985	38	16	9	7/1	111.80
Herman Kiefer Hospital[1]	Detroit	E. J. O'Brien	852	735	12	2	3	7/1	308.00
Mississippi State Tuberculosis Sanatorium[1]	Sanatorium, Miss.	L. R. Reid	151	675	1	1	1	.....	.....
Barnes Hospital*	St. Louis	E. A. Graham	545	.....	35	29	2	7/1	25.00
Berthold S. Pollak Hospital for Chest Diseases	Jersey City, N. J.	F. Bortone	394	.....	..	..	2	.....	.....
Kings County Hospital*[1]	Brooklyn	L. Hochberg	308	1,285	35	17	1	7/1	130.00
Edward J. Meyer Memorial Hospital*[1]	Buffalo	J. D. Stewart	75	.....	7	3	1	7/1	100.00
Herman M. Biggs Memorial Hospital[1]	Ithaca, N. Y.	R. Douglass	136	.....	1	1	2	.....	.....
Triboro Hospital[1]	Jamaica, N. Y.	D. A. Mulvihill	.....	.....	9	3	5	.....	80.00
Mount Morris Tuberculosis Hospital	Mount Morris, N. Y.	V. H. Kaunitz	60	.....	..	..	1	.....	.....
Bellevue Hospital Div. I—Columbia University*[1]	New York City	F. Berry	.....	.....	..	..	4	.....	.....
Metropolitan Hospital*[1]	New York City	S. A. Thompson	163	.....	15	3	1	7/1	150.00
Homer Folks Tuberculosis Hospital	Oneonta, N. Y.	A. M. Skinner	143	14	2	2	2	7	301.95
Ray Brook State Tuberculosis Hospital	Ray Brook, N. Y.		178	.....	..	..	2	.....	.....
Sea View Hospital[1]	Staten Island, N. Y.	L. R. Davidson	379	.....	16	..	7	7/1	130.00
North Carolina Baptist Hospital*[1]	Winston-Salem, N. C.	H. H. Bradshaw	123	27	16	11	2	.....	.....
City Hospital*[1]	Cleveland	S. O. Freelander	.....	787	..	..	2	7/1	70.00
University of Oregon Medical School Hospitals and Clinics*[1]	Portland, Ore.	W. S. Conklin	254	6,992	11	9	4	7/1	75.00
†Gaston Hospital	Dallas, Texas		.....	.....	..	..	..	.....	.....
Muirdale Sanatorium	Milwaukee	J. Steele	(See Pulmonary Diseases)				1	.....	.....

Numerical and other references will be found on page 225.

27. UROLOGY

The following services are approved by the Council and the American Board of Urology
Hospitals, 204; Assistant Residencies and Residencies, 468

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [6]	Beginning of Service (1949)	Length of Approved Program (years)	Beginning Stipend (Month)	
United States Army											
Letterman General Hospital*	San Francisco	J. Schwartz	410	3,006	4	3	4	.....	2	n	
Fitzsimons General Hospital*	Denver, Colo.	.....	.....	.....	..	..	..	.....	1	n	
Walter Reed General Hospital*	Washington, D. C.	J. C. Kimbrough	1,682	2,262	12	12	6	1, 7	3	n	
†Oliver General Hospital*	Augusta, Ga.	E. C. Lowry	348	1,017	3	3	..	1/1	3	n	
Brooke General Hospital*	San Antonio, Texas	G. R. Hamilton	1,094	7,521	11	9	6	.....	3	n	
Gorgas Hospital*	Ancon, C. Z.	.....	682	3,269	13	11	1	1/1	3	n	
Tripler General Hospital*	Moanalua, T. H.	.....	369	660	4	3	..	7/1	3	n	
United States Navy											
U. S. Naval Hospital*	Long Beach, Calif.	L. A. Newton	762	1,237	1	1	3	.....	3	n	
U. S. Naval Hospital*	Oakland, Calif.	A. L. Abernethy	.....	.....	..	..	2	.....	3	n	
U. S. Naval Hospital*	San Diego, Calif.	J. S. Hanten	975	855	5	3	2	.....	3	n	
U. S. Naval Hospital*	Bethesda, Md.	H. J. Cokely	803	2,353	15	9	2	Varies	3	n	
U. S. Naval Hospital*	St. Albans, N. Y.	S. Johnson	220	162	13	9	3	.....	3	n	
U. S. Naval Hospital*	Philadelphia	J. W. Rogers	1,068	3,580	41	19	4	.....	3	n	
U. S. Naval Hospital*	Portsmouth, Va.	.....	.....	.....	..	..	1	.....	3	n	
United States Public Health Service											
U. S. Marine Hospital*[1]	Baltimore	J. S. Haines	1,396	4,282	5	5	1	7/1	2	n	
†U. S. Marine Hospital*[1]	Stapleton, S. I., N. Y.	C. Ferguson	584	509	9	4	3	7/1	3	n	
Federal Security Agency											
†Freedmen's Hospital*[1]	Washington, D. C.	R. F. Jones	285	2,815	16	8	1	7/1	3	n	
Veterans Administration											
†Veterans Admin. Center [1]	Los Angeles, Calif.	.....	382	564	23	16	6	.....	3	n	
†Veterans Admin. Hospital	Oakland, Calif.	.....	.....	.....	..	..	2	.....	3	n	
†Veterans Admin. Hospital [1]	San Francisco	H. M. Weyrauch	233	644	5	5	2	7/1	3	n	
†Veterans Admin. Hospital [1]	Van Nuys, Calif.	D. Malcolm	331	2,804	13	10	3	1/1, 7/1	3	n	
†Veterans Admin. Hospital	Newington, Conn.	C. Deming	350	303	5	2	1	7/1	3	n	
†Veterans Admin. Hospital	Chamblee, Ga.	M. K. Bailey	399	52	15	8	3	7/1	3	n	
†Veterans Admin. Hospital	Hines, Ill.	F. Lloyd	1,218	.....	68	33	7	7/1, 1/2	3	n	
†Veterans Admin. Center [1]	Wadsworth, Kan.	I. S. Brown	200	5	9	8	3	1, 7	3	n	
†Veterans Admin. Hospital [1]	Louisville, Ky.	M. I. Schwalbe	482	3	..	..	3	.....	2	n	
†Veterans Admin. Hospital [1]	New Orleans, La.	E. Burns	320	177	9	8	2	7/1	3	n	
†Veterans Admin. Hospital	Fort Howard, Md.	H. Meisel	230	120	1	1	1	Varies	3	n	
†Veterans Admin. Hospital (West Roxbury) [1]	Boston	S. Yose	401	1,025	10	7	3	7	3	n	
†Veterans Admin. Hospital [1]	Framingham, Mass.	.....	286	.....	13	3	3	.....	2	n	
Veterans Admin. Hospital	Minneapolis, Minn.	.....	473	.....	11	8	3	.....	..	n	
†Veterans Admin. Hospital [1]	Jefferson Bks., Mo.	.....	408	.....	5	1	3	.....	3	n	
†Veterans Admin. Hospital	Lincoln, Neb.	.....	225	.....	7	5	2	.....	3	n	
Veterans Admin. Hospital	Albuquerque, N. M.	.....	241	.....	3	3	1	7/1	3	n	
Veterans Admin. Hospital	New York City	P. K. Sauer	624	360	21	11	5	1, 7	2	n	
†Veterans Admin. Hospital [1]	Staten Island, N. Y.	S. N. Kessler	301	149	17	12	1	7/1	3	n	
†Veterans Admin. Hospital [1]	Cleveland	L. C. Morris	519	132	4	4	2	7/1	3	n	
Veterans Admin. Hospital	Portland, Ore.	P. B. Potampa	443	.....	8	7	1	1/1, 7/1	3	n	
†Veterans Admin. Hospital	Aspinwall, Pa.	C. A. Kuchn	450	.....	21	16	3	7/1	3	n	
Veterans Admin. Center	Columbia, S. C.	T. M. Yates	466	.....	21	12	3	7	3	n	
†Veterans Admin. Hospital	Memphis, Tenn.	F. M. Jacobs	655	285	16	12	2	7/1	3	n	
†Veterans Admin. Hospital	Nashville, Tenn.	H. S. Shelby	.....	.....	..	..	1	.....	3	n	
†Veterans Admin. Hospital [1]	Dallas, Texas	.....	242	9	3	1	1/1, 7/1	3	n		
Veterans Admin. Hospital [1]	McKinney, Texas	P. A. Duff	.....	.....	..	..	1	.....	3	n	
†Veterans Admin. Hospital [1]	Richmond, Va.	R. C. Bunts	563	1,455	6	4	4	7/1	3	n	
†Veterans Admin. Center [1]	Milwaukee	.....	398	1,299	17	13	4	7/1	3	n	
Nonfederal											
†Carraway Methodist Hospital*	Birmingham, Ala.	L. Timberlake	341	1,231	2	2	1	7/1	3	$100.00	
Jefferson and Hillman Hospitals*[1]	Birmingham, Ala.	B. Barelare	475	.....	15	9	3	.....	3	.....	
Los Angeles County Hospitals*[1]	Los Angeles	J. J. Cane	2,482	11,428	193	70	6	Varies	3	165.00	
†Presbyterian Hospital—Olmsted Memorial*	Los Angeles	.....	.....	.....	..	..	1	.....	2	.....	
White Memorial Hospital*	Los Angeles	R. W. Barnes	518	5,519	16	8	1	7/1	3	140.00	
San Diego County General Hospital*	San Diego, Calif.	R. Prentiss	332	387	22	10	2	7/1	2	125.00	
Franklin Hospital*	San Francisco	H. B. Stephens	106	.....	3	1	3	.....	2	100.00	
San Francisco Hospital*	San Francisco	C. M. Johnson	509	.....	33	7	2	.....	2	175.00	
Southern Pacific General Hospital	San Francisco	.....	.....	.....	..	..	1	.....	2	.....	
Stanford University Hospitals*[1]	San Francisco	J. R. Dillon	426	3,871	4	1	1	7/1	3	50.00	
University of California Hospitals*[1]	San Francisco	F. Hinman	384	8,751	4	4	1	7/1, 8/1, 9/1	3	50.00	
Santa Clara County Hospital*	San Jose, Calif.	D. Fagerstrom	344	1,695	12	9	1	7/1	2	225.00	
†Harbor General Hospital*	Torrance, Calif.	G. D. Stillson	244	.....	22	12	1	7/1	3	.....	
University of Colorado Medical Center	Denver	.....	.....	.....	..	..	..	.....	3	.....	
Colorado General Hospital*[1]	Denver	D. R. Higby	439	3,060	13	9	2	7/1	3	75.00	
†Denver General Hospital*[1,23]	Denver	D. Newland	355	.....	23	14	1	7	..	40.00	
Corwin Hospital*	Pueblo, Colo.	.....	.....	.....	..	..	..	.....	3	.....	
Grace-New Haven Community Hospital											
New Haven Unit (University Service)*[1]	New Haven, Conn.	C. Deming	566	2,352	23	9	2	7/1	3	40.00	
†Hospital of St. Raphael*	New Haven, Conn.	L. L. Maurer	.....	.....	..	..	1	7/1	3	75.00	
†Waterbury Hospital*[1]	Waterbury, Conn.	H. J. Stettbacher	530	175	19	9	1	.....	2	100.00	
Gallinger Municipal Hospital*[1]	Washington, D. C.	.....	376	1,416	21	10	3	7/1	3	.....	
Duval Medical Center	Jacksonville, Fla.	.....	.....	.....	..	..	..	.....	2	.....	
St. Vincent's Hospital*	Jacksonville, Fla.	R. McIver	357	.....	22	9	2	7/1	2	100.00	
†Jackson Memorial Hospital*[1]	Miami, Fla.	.....	.....	.....	..	..	..	.....	2	.....	
Grady Memorial Hospital*[1,15]	Atlanta, Ga.	M. K. Bailey	910	7,174	45	17	6	7/1	3	.....	
University Hospital*	Augusta, Ga.	J. R. Rinker	355	.....	11	..	1	7/1	2	40.00	
†Alexian Brothers Hospital*	Chicago	.....	334	.....	21	10	1	7/1	2	100.00	
Cook County Hospital*	Chicago	W. J. Baker	1,609	3,534	181	..	3	1/1, 7/1	3	32.00	
†Mercy Hospital-Loyola University Clinics*	Chicago	H. E. Landes	225	1,813	12	4	1	.....	3	25.00	
Michael Reese Hospital*[1]	Chicago	H. C. Rolnick	555	1,618	..	..	2	1/1, 7/1	3	25.00	
†Mount Sinai Hospital*[1]	Chicago	H. C. Rolnick	333	1,107	26	7	1	7/1	2	50.00	

Numerical and other references will be found on page 225.

27. UROLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst. Res. and Residencies Offered [1]	Beginning of Service (1949)	Length of Approved Program (years)	Beginning Stipend (Month)
Presbyterian Hospital*	Chicago	N. J. Heckel	864	2,678	13	9	3	.....	3	$ 25.00
†Provident Hospital*[1]	Chicago	W. S. Grant	213	1,303	11	2	2	.....	2	.....
St. Luke's Hospital*	Chicago	H. Culver	537	1,537	23	14	2	7/1	3	25.00
University of Chicago Clinics*[1]	Chicago	C. B. Huggins	309	6,597	15	14	2	7/1	3	25.00
Wesley Memorial Hospital*[1]	Chicago	V. J. O'Conor	728	.....	14	7	2	.....	3	25.00
†Evanston Hospital*	Evanston, Ill.	J. I. Farrell	282	365	4	4	1	.....	3	50.00
†St. Francis Hospital*	Evanston, Ill.	.....	579	.....	14	9	..	.....	1	.....
St. Francis Hospital*[1]	Peoria, Ill.	A. Sprenger	639	261	25	11	1	7/1	3	150.00
Indianapolis General Hospital*	Indianapolis	E. W. Rupel	400	2,202	32	17	2	7/1	3	80.00
†Indiana University Medical Center*[1]	Indianapolis	H. O. Mertz	267	1,581	15	9	3	7/1	3	68.33
†Methodist Hospital*[1]	Indianapolis	R. D. Howell	1,251	.....	31	12	2	7/1	3	200.00
University Hospitals*[1]	Iowa City	N. Alcock	1,890	1,649	53	26	6	7/1	3	50.00
University of Kansas Medical Center*	Kansas City, Kan.	W. L. Valk	528	1,511	27	16	3	7/1	3	.....
†St. Joseph Hospital*	Lexington, Ky.	E. H. Ray	592	.....	22	9	1	7/1	2	90.00
†Louisville General Hospital*	Louisville, Ky.	R. E. Lich	287	2,319	11	5	2	7/1	2	.....
Charity Hospital of Louisiana*[1]	New Orleans	.....	2,206	16,315	88	29	14	7/1	3	25.00
†Ochsner Foundation Hospital *[1]	New Orleans	E. Burns	372	13,160	8	5	3	Varies	3	150.00
Touro Infirmary*	New Orleans	W. A. Reed	593	3,859	14	6	1	.....	3	25.00
†Shreveport Charity Hospital*	Shreveport, La.	R. K. Womack	618	1,611	25	11	1	7/1	3	60.00
Johns Hopkins Hospital*	Baltimore	W. W. Scott	1,036	4,474	23	15	5	7/1	3	41.66
†Sinai Hospital*[1]	Baltimore	A. E. Goldstein	440	.....	27	15	3	7/1	3	25.00
Beth Israel Hospital*[1]	Boston	G. C. Prather	338	2,217	..	..	1	10/1	3	41.66
Boston City Hospital*[1]	Boston	G. C. Prather	554	5,818	22	9	3	.....	3	.....
Lahey Clinic	Boston	.....	.....	.....	..	..	3	.....	3	.....
Massachusetts General Hospital*	Boston	F. H. Colby	433	.....	15	7	3	.....	3	.....
Massachusetts Memorial Hospitals*[1]	Boston	S. N. Vose	.....	1,158	8	7	2	7/1	3	50.00
Peter Bent Brigham Hospital*	Boston	(Included in Surgery)					2	.....	3	.....
†Mount Auburn Hospital*[1]	Cambridge, Mass.	H. Chamberlin	230	170	..	..	1	7/1	1	100.00
†Worcester City Hospital*[1]	Worcester, Mass.	L. M. Felton	.....	.....	..	..	2	7/1	2	50.00
University Hospitals*[1]	Ann Arbor, Mich.	K. Sells	1,317	7,954	24	17	6	7/1	3	111.80
City of Detroit Receiving Hospital*[1]	Detroit	F. Cole	791	4,040	43	19	3	7/1	3	188.00
Grace Hospital*	Detroit	L. W. Hull	1,072	545	19	9	2	7/1	3	75.00
Harper Hospital*[1]	Detroit	F. H. Cole	1,209	1,166	19	7	4	7/1	2	.....
Henry Ford Hospital*[1]	Detroit	J. K. Ormond	659	15,025	19	14	3	7/1	3	200.00
Wayne County General Hospital and Infirmary*[1]	Eloise, Mich.	W. L. Sherman	703	1,451	62	33	2	7/1	3	235.00
Minneapolis General Hospital*[1]	Minneapolis	T. H. Sweetser	331	1,900	19	16	1	1/1	3	115.00
St. Mary's Hospital*	Minneapolis	T. H. Sweetser	463	120	9	6	1	9	3	150.00
University of Minnesota Hospitals*[1]	Minneapolis	C. D. Creevy	785	2,787	24	16	3	.....	3	.....
Mayo Foundation	Rochester, Minn.	G. J. Thompson	.....	.....	..	..	15	.....	3	92.50
Ancker Hospital*	St. Paul	F. E. B. Foley	368	1,816	24	15	2	7/1	3	91.50
Charles T. Miller Hospital*[1]	St. Paul	F. E. B. Foley	523	708	12	8	1	Varies	3	115.00
Kansas City General Hospital No. 1*	Kansas City, Mo.	A. L. Stockwell	544	2,253	36	19	2	7	3	50.00
Research Hospital*[1]	Kansas City, Mo.	R. L. Hoffman	486	6	15	11	1	7/1	3	.....
†Barnes Hospital*	St. Louis	D. K. Rose	808	3,822	26	22	1	7/1	3	25.00
Homer G. Phillips Hospital*[1]	St. Louis	.....	.....	.....	..	..	2	7/1	3	95.00
†Missouri Baptist Hospital*	St. Louis	C. E. Burford	724	.....	..	..	1	7/1	3	70.00
†Missouri Pacific Hospital	St. Louis	.....	.....	.....	..	..	.....	.....	3	.....
St. Louis City Hospital*[1]	St. Louis	Wattenberg, Carroll, and Rickey	482	1,789	84	36	3	7/1	3	95.00
St. Mary's Group of Hospitals*	St. Louis	C. E. Burford	713	2,538	21	9	3	7/1	3	35.00
Atlantic City Hospital*	Atlantic City, N. J.	C. H. de T. Shivers	357	4,273	4	1	1	7/1	2	50.00
Bayonne Hospital and Dispensary*	Bayonne, N. J.	A. J. Balsamo	587	670	2	1	2	7/1	3	.....
†Cooper Hospital*	Camden, N. J.	.....	429	4,751	17	8	1	7/1	3	83.33
Jersey City Hospital*	Jersey City, N. J.	E. J. Daly	432	3,080	27	4	2	.....	3	.....
Newark City Hospital*	Newark, N. J.	C. R. O'Crowley	.....	.....	..	..	1	7	3	.....
†Orange Memorial Hospital*	Orange, N. J.	.....	427	449	21	2	..	Varies	2	100.00
Albany Hospital*[1]	Albany, N. Y.	J. E. Heslin	800	1,132	22	12	2	7/1	3	41.67
Jewish Hospital*[1]	Brooklyn	P. Aschner	662	1,474	24	9	..	.....	2	.....
Kings County Hospital*[1]	Brooklyn	F. L. Senger	1,546	4,417	182	8	3	7/1	3	80.00
Long Island College Hospital*	Brooklyn	F. L. Senger	581	2,946	15	3	3	7/1	3	25.00
†Methodist Hospital*	Brooklyn	H. T. Langworthy	506	447	7	3	1	7/1	3	.....
Buffalo General Hospital*	Buffalo	O. J. Oberkircher	592	1,659	15	6	2	7/1	3	25.00
Edward J. Meyer Memorial Hospital*[1]	Buffalo	E. M. Watson	445	2,600	48	19	2	7/1	3	100.00
†Millard Fillmore Hospital*	Buffalo	G. Slotkin	659	.....	29	11	2	7/1	2	50.00
Queens General Hospital*	Jamaica, N. Y.	F. G. Riley	936	6,484	80	58	4	7/1	3	50.00
Bellevue Hospital, Div. II—Cornell University*[1]	New York City	R. S. Hotchkiss	735	9,709	39	6	3	.....	3	50.00
Beth Israel Hospital*	New York City	S. F. Wilhelm	809	3,137	31	8	3	7/1	3	50.00
Metropolitan Hospital*[1]	New York City	S. Carleton	374	2,784	44	7	1	7/1	2	130.00
Morrisania City Hospital*[1]	New York City	J. Duff	754	2,463	22	4	4	1/1	3	80.00
†Mount Sinai Hospital*[1]	New York City	G. D. Oppenheimer	.....	.....	..	..	2	.....	3	50.00
New York City Hospital*[1]	New York City	T. J. Kirwin	259	2,195	32	11	2	7/1	2	130.00
New York Hospital*	New York City	O. Lowsley and V. Marshall	.....	11,767	..	..	5	7/1	3	25.00
New York Polyclinic Medical School and Hospital*	New York City	.....	488	.....	5	..	2	7/1	3	50.00
Presbyterian Hospital*[1]	New York City	G. F. Cahill	1,296	8,911	40	..	6	.....	3	41.66
Roosevelt Hospital*[1]	New York City	S. A. Belsler	592	2,817	16	7	3	7/1	3	70.00
St. Clare's Hospital*[1]	New York City	W. V. Healey	4,760	8,602	78	36	5	7/1	2	25.00
St. Luke's Hospital*	New York City	J. A. Taylor	696	3,467	13	3	2	7	3	50.00
University Hospital*	New York City	C. T. Stepita	540	3,470	5	1	..	.....	3	15.00
Strong Memorial—Rochester Municipal Hospitals*[1]	Rochester, N. Y.	W. W. Scott	1,365	13,219	..	..	3	.....	3	45.00
Sea View Hospital *[1]	Staten Island, N. Y.	A. M. Greenberger	132	.....	..	..	2	7/1	1	130.00
Charlotte Memorial Hospital*	Charlotte, N. C.	W. E. Daniel	1,313	116	15	4	2	7/1	3	60.00
Duke Hospital*[1]	Durham, N. C.	E. P. Alyea	531	4,133	12	7	4	7/1	3	83.33
Watts Hospital*	Durham, N. C.	.....	560	2,161	12	6	3	7/1	2	50.00
North Carolina Baptist Hospital*[1]	Winston-Salem, N. C.	F. K. Garvey	524	1,987	14	2	4	7/1	3	.....
City Hospital*[1]	Cleveland	H. Trattner	422	3,123	30	..	2	.....	3	70.00
Cleveland Clinic Hospital *[1]	Cleveland	C. C. Higgins	1,249	20,575	20	3	5	7/1	3	100.00
University Hospitals*[1]	Cleveland	J. J. Jocison	1,120	4,029	10	..	1	7/1	3	25.00
Ohio State University Hospital*[1]	Columbus, Ohio	W. N. Taylor	526	1,442	32	21	3	7/1	2	50.00
St. Vincent's Hospital*[1]	Toledo, Ohio	L. P. Dolan	726	23	13	4	2	7	2	100.00
University Hospitals*	Oklahoma City	B. A. Hayes	212	2,846	13	3	1	7/1	3	35.00

Numerical and other references will be found on page 225.

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27. UROLOGY—Continued

Name of Hospital	Location	Chief of Service	Inpatients Treated	Outpatient Visits	Deaths	Autopsies	Asst., Res. and Fellowships Offered *	Beginning of Service (Mo.)	Length of Program (Years)	Beginning Stipend (Month)
Hillcrest Memorial Hospital*[1]	Tulsa, Okla.	J. O. Akins	328	.....	13	3	..	.....	3	.....
St. John's Hospital*[1]	Tulsa, Okla.	H. S. Browne	715	.....	15	1	1	.....	2	$150.00
St. Vincent's Hospital*	Portland, Ore.		.....	.....	..	..	1	.....	2	.....
University of Oregon Medical School Hospitals and Clinics*[1]	Portland, Ore.	J. R. Hand	257	3,081	14	9	4	7/1	3	75.00
Allentown Hospital*	Allentown, Pa.	W. C. Masonheimer	736	160	11	5	1	7/1	2	100.00
George F. Geisinger Memorial Hospital*	Danville, Pa.	W. I. Buchert	870	7,346	15	11	1	.....	3	75.00
St. Vincent's Hospital*	Erie, Pa.	E. Hess	1,565	4,396	20	12	4	7/1	3	50.00
†Harrisburg Hospital*	Harrisburg, Pa.	S. L. Grossman	476	5,081	24	7	1	7/1	2	100.00
†Episcopal Hospital*[1]	Philadelphia	G. D. Shoup	207	617	6	2	1	7/1	2	50.00
Graduate Hospital of the University of Pennsylvania*	Philadelphia		173	2,790	10	5	1	7/1	2	.....
†Hahnemann Hospital*[1]	Philadelphia	E. W. Campbell	861	2,839	3	..	2	.....	3	25.00
Hospital of the University of Pennsylvania*[1]	Philadelphia	P. B. Hughes	809	3,343	11	8	3	Varies	3	.....
Jefferson Medical College Hospital*	Philadelphia		838	5,484	20	10	3	7/1	3	.....
†Lankenau Hospital*	Philadelphia	C. A. W. Uhle	300	.....	7	4	1	7/1	2	80.00
†Mount Sinai Hospital*[1]	Philadelphia	M. Muschat and I. J. Carp	357	327	25	18	1	6/21	2	50.00
Pennsylvania Hospital*	Philadelphia	L. Herman	638	3,602	9	5	2	7/1	3	20.00
†Philadelphia General Hospital*	Philadelphia		671	.....	46	..	3	7/1	3	70.00
Presbyterian Hospital*[10]	Philadelphia	J. Birdsall	.....	.....	..	..	1	.....	3	25.00
†Temple University Hospital*[1]	Philadelphia	K. B. Conger	401	2,115	12	9	1	7/1	3	.....
Mercy Hospital*[1]	Pittsburgh	E. J. McCague	520	558	6	2	1	9/1	3	100.00
†University of Pittsburgh Medical Center	Pittsburgh		.....	.....	..	..	2	.....	3	.....
Robert Packer Hospital*	Sayre, Pa.	W. Baurys	478	1,102	10	5	1	7/1	3	150.00
†Uniontown Hospital*	Uniontown, Pa.		.....	.....	..	..	1	.....	1	.....
Mercy Hospital*	Wilkes-Barre, Pa.	P. P. Mayock	308	1,779	9	5	1	7/1	1	75.00
†Roper Hospital*[1]	Charleston, S. C.	J. J. Ravenel	570	1,532	9	1	1	7/1	3	25.00
†Tri-County Hospital	Orangeburg, S. C.	L. P. Thackston	1,104	6,939	9	9	2	7/1	3	100.00
†John Gaston Hospital*	Memphis, Tenn.	T. D. Moore	661	6,478	25	14	3	.....	3	.....
†St. Joseph Hospital*[1]	Memphis, Tenn.	C. D. Allen	603	31	21	6	2	7/1	2	.....
Parkland Hospital*[1]	Dallas, Texas	K. King	434	3,920	17	9	2	7/1	3	50.00
University of Texas Medical Branch Hosps.*[1]	Galveston, Texas	R. E. Cone	364	4,500	6	2	3	7	3	50.00
†Hermann Hospital*	Houston, Texas	C. M. Crigler	873	1,673	20	12	3	.....	3	50.00
†Mary Fletcher Hospital*[23]	Burlington, Vt.	W. M. Flagg	438	7	11	9	4	7/1	2	68.75
University of Virginia Hospitals*[1]	Charlottesville, Va.	S. M. Vest	626	3,274	19	6	4	7/1	3	.....
Medical College of Virginia Hospital Division*[1]	Richmond, Va.	A. I. Dodson	593	2,600	22	8	3	7/1	3	46.50
†St. Mary's Hospital*	Huntington, W. Va.	R. M. Bobbitt	769	.....	20	1	1	11/1	3	100.00
†La Crosse Lutheran Hospital*[1]	La Crosse, Wis.	A. Gunderson	.....	.....	..	..	1	7	1	150.00
Madison General Hospital*	Madison, Wis.	I. R. Sisk	680	.....	31	13	1	7/1	2	50.00
State of Wisconsin General Hospitals*[1]	Madison, Wis.	I. Sisk	509	.....	17	15	3	7	3	25.00
Milwaukee County Hospital*[1]	Milwaukee	J. C. Sargent	800	1,906	33	2	2	Varies	2	158.02

Numerical and Other References

n. Salary established by government pay tables.

*. Indicates hospitals approved for training interns.

†. Indicates temporary approval.

1. Residencies open to women.

2. Affiliated with Veterans Administration Hospital, Newington, Conn.

3. Affiliated with Shriners' Hospital for Crippled Children, Salt Lake City.

4. Affiliated with Lakeville State Sanatorium, Middleboro; New England Peabody Home, Newton Center; Boston City Hospital, Boston.

5. Clinical data includes psychiatry.

6. Inpatients: Data refers to total inpatients treated in specialty. Obstetrical admissions do not include newborn. In general residency and pathology total hospital admissions are used.

7. Clinical data includes neurology.

8. Includes fellowships.

9. Affiliated with Northwest Clinic, Minot, N. D.

10. Includes acceptable affiliate assignment at Urologic Clinic, Philadelphia.

11. Includes affiliate service at South Bend Medical Laboratory, St. Joseph Hospital, South Bend; Elkhart General Hospital, Elkhart and St. Joseph's Hospital, Mishawaka, Ind.

12. Represents training acceptable to Board in (1) radiology, (2) roentgenology, (3) therapeutic radiology, (4) diagnostic roentgenology.

13. Affiliated with North Carolina Orthopedic Hospital, Gastonia, and Georgia Warm Springs Foundation, Warm Springs.

14. Type of training acceptable to Board: A—adult orthopedics; C—children's orthopedics; F—fractures; S—basic sciences.

15. Includes affiliate service at Emory University.

16. Affiliated with Genesee Hospital.

17. Acceptable affiliations at Norton Memorial Infirmary and Veterans Administration Hospital, Louisville, Ky.

18. Affiliated with Sea View Hospital and St. Vincent's Hospital, Staten Island, N. Y.

19. Training will also be carried out at DeKalb Public Hospital and St. Mary's Hospital, DeKalb, Ill.

20. Part of three year program offered by Harper, City of Detroit Receiving and Children's hospitals in affiliation with Wayne University.

21. In affiliation with Johns Hopkins Hospital, Baltimore.

22. Approved for training in syphilology only.

23. Affiliated with Medical School of the University of Vermont, to include assignment at Bishop DeGoesbriand Hospital.

24. Affiliated with Free Hospital for Women, Brookline, Mass.

25. In affiliation with Hartford Hospital, Hartford, Conn.

26. In affiliation with Good Samaritan and St. Vincent's Hospitals, Portland, Ore.

27. Affiliated with Wesley Memorial Hospital, Chicago.

28. Apply: Office of Graduate Medical Education, University of Colorado Medical Center.

29. Includes affiliated service at Lakeville State Sanatorium, Middleboro, Mass.

30. Training program under the sponsorship of the University of Washington School of Medicine, Seattle.

31. Includes Stanford University Division—F½; University of California Division—AF 1½.

32. Includes affiliated service at Milwaukee Children's Hospital.

33. In affiliation with Georgetown University and George Washington University.

34. Affiliated with University of Minnesota.

35. Affiliated with Veterans Administration Hospital, Legion, Texas.

36. Affiliated with Betty Bacharach Home, Longport, N. J.

37. Affiliated with Harlem Hospital, New York City.

38. Affiliated with Holy Ghost Hospital, Cambridge, Mass., and Jewish Memorial Hospital, Roxbury, Mass.

39. Affiliated with Permanente Foundation Hospital and Stanford Convalescent Home.

40. Affiliated with St. Francis Hospital.

41. Affiliated with Division of Graduate Medicine, Tulane University School of Medicine.

42. May include six months' assignment to Dept. of Rehabilitation and Physical Medicine's approved program.

43. Includes affiliated service at DePaul Sanatorium, New Orleans.

44. Affiliated with University of Oregon Medical School, hospitals and clinics, Portland.

45. Affiliated with Mary Hitchcock Memorial Hospital, Hanover, N. H.

46. Affiliated with Veterans Administration Hospital, Aspinwall, Pa.

47. Affiliated with Bryan Memorial, Lincoln, Neb.

48. Affiliated with South Bend Medical Foundation, South Bend, Ind.

49. Affiliated with Children's Hospital, Louisville, Ky.

50. May include one year in the Department of Metabolic and Endocrine Diseases.

51. Affiliated with Cowell Memorial Hospital, Berkeley, Calif.

THE JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION

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SATURDAY, MAY 14, 1949

REVISION OF ESSENTIALS OF AN APPROVED INTERNSHIP

In November 1948 the Council on Medical Education and Hospitals completed the first major revision of the "Essentials of An Approved Internship" since 1942. The revision was ratified by the House of Delegates at the St. Louis Interim Session, and its provisions are now in effect. A careful study of the new "Essentials" is indicated so that hospitals may adjust their programs to the present requirements, if necessary, and thus continue to qualify for internship approval.

With the exception of the necropsy data, the quantitative requirements have not been changed appreciably. Hospitals with capacities of 100 beds and over, maintaining an average daily census of 85 patients and an annual admission rate of 2,500, are eligible for approval. The necropsy rate has been raised from 15 to 20 per cent. This increase is consistent with the generally accepted principle that a hospital's necropsy rate constitutes a reliable gage of the staff's interest in scientific advancement. While the necropsy rate was raised, the quantitative requirement of 36 necropsies per annum was eliminated, so as not to penalize a hospital in which a relatively low number of deaths occur.

The Council in its present "Essentials" has reemphasized the importance of a well organized program for intern training, stating that internships arranged merely to provide hospitals with resident personnel to assist in the clinical work of the hospital cannot be approved. The Council has suggested that the appointment of a director of intern education on a full time or part time basis may be desirable in hospitals in which the members of the staff are unable to devote the necessary time to the careful planning and supervision of the details of the internship program. The attending staff is not to be relieved of responsibility for teaching; rather, the director will correlate the activities of the several services and supervise the over-all program. The ultimate responsibility for training the intern lies with the staff through instruction at the bedside, in the operating and delivery rooms and in other daily contacts. The "Essentials" suggests that an orientation period be arranged at the beginning of his service during which the staff should acquaint the new intern with the administrative and professional organization of the hospital and introduce him to the ancillary services of the hospital which are available to assist in the care and treatment of the patient.

The "Essentials" include the statement that the Council believes that a well organized rotating internship is likely to provide the best basic training for either the future general practitioner or the specialist. This type of training provides for adequate experience in the four major clinical divisions. Too frequent a rotation of assignments or assignment to more than one service at a time is not considered desirable. The Council recommends that at least three months be devoted both to internal medicine and to surgery and states that any assignment of less than two months' duration is unsatisfactory. While the majority of internships presently approved are of one year's duration, longer periods of service are considered preferable, since they permit a more satisfactory educational program and allow the intern sufficient time in which to be trained adequately to assume increasing responsibility in various fields of medicine.

For the first time, the "Essentials" provide a method for determining the number of interns to be appointed. The bed capacity of the hospital is used as a basis, with a range of 15 to 25 beds per intern recommended. Consideration should be given to the amount of responsibility required of the intern for work in outpatient departments, emergency services, laboratories or similar assignments in determining the ratio which the hospital may wish to use. While the Council does not establish a specific number of interns to be appointed by approved hospitals, the hospitals will, no doubt, comply with this requirement in organizing their programs.

Hospitals approved for intern training are currently being reappraised on the basis of these new "Essentials." Probably the Council will reconsider the approved status of the hospitals which fail to meet the quantitative requirements or which have not organized a training program that measures up to the new standards established. Council approval is granted on a year to year basis and may be withdrawn at any time that a hospital ceases to meet one or more of the requirements set forth. Approval may also be withdrawn from hospitals in which the intern program has not been in operation for a period of two consecutive years.

The provisions of the new "Essentials" have been called to the attention of all hospitals approved by the Council. Development of internship programs on the

basis of the requirements set forth in the present revision will result in a higher level of intern training, particularly in hospitals that have allowed the educational aspects of the internship to become subordinate to the service requirements.

EARLY RISING AFTER SURGICAL OPERATION

Early rising after operation was first advocated in this country by Emil Ries[1] of Chicago as early as 1899. Patients of Dr. Ries were made to sit in a chair for ten minutes on the second postoperative day regardless of the extent of the surgical procedure. The method was adopted somewhat later by Dr. H. M. Richter, also of Chicago, by the Mayos and by numerous other American surgeons. The Germans usually credit Heinrich Braun with priority in this field. At the thirty-seventh congress of the German Surgical Society in 1908 Kümmel and Krönig spoke enthusiastically of the method. A further impetus to early postoperative ambulation in this country was given by the report of Leithauser and Bergo,[2] in which the authors stated that pulmonary or vascular complications, dehiscence, hernia, thrombophlebitis or other serious complications failed to occur in a series of 436 operative cases. The nature of the intervention in 330 cases of this series was of a type considered minor, and in only 66 cases reported by them was the operation of the type considered major.

The advocates of early rising stressed, as pointed out in an early editorial in THE JOURNAL,[3] the beneficial influence of the method on the pulmonary and intestinal functions; also on the function of micturition as well as on the mental state of the patient.

A recent report by Blodgett[4] from Peter Bent Brigham Hospital offers an evaluation of both advantages and limitations of the method. Early rising has been practiced in this hospital since 1942. Noted among the advantages was a more rapid return to normal strength and activity and a better outlook and morale in the patient. When men were allowed to stand to void, a lowered incidence of urinary retention was noted. Early ambulation prevented the definite loss of strength that occurs with continued bed rest and shortened the period of convalescence. For a study of the incidence of postoperative complications, a series of patients was chosen in which the incidence of such complications is highest. The operations included major intra-abdominal operations and herniorrhaphies of various types. The test series consisted of 504 cases in which early rising was practiced and a control series of 680 cases, in all of which the patients remained in bed for at least seven days after operation. Particular attention was paid to the incidence of atelectasis, phlebitis, wound infection and wound disruption. The incidence of atelectasis in early risers was 6.3 per cent and among late risers 6.2 per cent, a difference which is statistically insignificant. Thrombophlebitis of the deep veins in the legs occurred in 1.9 per cent in the late rising groups as compared with 2 per cent in the early rising group. With regard to wound infection, all that could be said was that early rising did not increase it, since the incidence was 2.8 per cent in the early rising group as compared with 4.4 per cent in the late rising group. Wound disruption after intra-abdominal operations in the late rising group occurred in 2.7 per cent and in 1.2 per cent in the early rising group. A follow-up of 421 herniorrhaphies for some six months to six years revealed a rate of recurrence of 4 per cent for the late risers in the group of indirect inguinal hernias and of 3.1 per cent among the early risers. The recurrence rate for direct hernia was 12.5 per cent in the late risers as compared with 9.4 per cent in the early risers.

These statistical data, according to Blodgett, do not show that early rising reduces the incidence of atelectasis or phlebitis, but they do show that early rising is without apparent ill effect on wound healing, wound infection or wound disruption and on the recurrence rate in hernias. The advantages of the method are to be seen in the prevention of the onset of weakness, in diminution of wound pain, acceleration of convalescence and reduction of the required nursing care.

1. Ries, E.: Some Radical Changes in the After-Treatment of Celiotomy Cases, J. A. M. A. **33**: 454 (Aug. 19) 1899.
2. Leithauser, D. J., and Bergo, H. L.: Early Rising and Ambulatory Activity After Operation: A Means of Preventing Complications, Arch. Surg. **42**: 1089 (June) 1941.
3. Early Rising After Operation, editorial, J. A. M. A. **117**: 1710 (Nov. 15) 1941.
4. Blodgett, J. B.: Early Ambulation Following Surgical Procedures, Bull. New York Acad. Med. **25**: 176 (March) 1949.

DUPLEX MUMPS ANTIGEN

In 1942 Enders and Cohen[1] of the Department of Bacteriology, Harvard University, described a complement fixation test for mumps. The test employed a suspension of parotid glands from monkeys infected with mumps virus. The test was found useful in the diagnosis of some unusual manifestations of mumps infection, such as meningoencephalitis in the absence of parotitis.[2] Positive complement fixation reactions were obtained with the serums of 42 per cent of persons without previous history of mumps, which was interpreted as a measure of the frequency of inapparent infection with the mumps virus.

Habel,[3] Levens[4] and others subsequently adapted the mumps virus to the chick embryo, thus furnishing a cheaper and more readily available source of mumps antigen. Subsequently Henle and others[5] of the

1. Enders, J. F., and Cohen, S.: Proc. Soc. Exper. Biol. & Med. **50**: 180, 1942. Enders, J. F.; Cohen S., and Kane, L. W.: J. Exper. Med. **81**: 119, 1945.
2. Kane, L. W., and Enders, J. F.: J. Exper. Med. **81**: 137, 1945.
3. Habel, K., Pub. Health Rep. **60**: 201, 1945.
4. Levens, J. H., and Enders, J. F.: Science **102**: 117, 1945. Beveridge, W. I. B.; Lind, P. E., and Anderson, S. G.: Australian J. Exper. Biol. & Med. Sc. **24**: 15, 1946.
5. Henle, G.; Henle, W., and Harris, S.: Proc. Soc. Exper. Biol. & Med. **64**: 290, 1947.

Department of Pediatrics, University of Pennsylvania, showed that the chick embryo antigen consists of a mixture of two serologically distinct complement fixation factors. One of these factors ("V antigen") is closely linked with the mumps virus and is found predominantly in the allantoic and amniotic fluids of the virus-infected chick embryo. The second or soluble factor ("S antigen") is found mainly in the infected embryonic tissues such as the allantoic and amniotic membranes. The two antigens can be separated by high speed centrifugation and sharply differentiated by serum reactions. Antibody against V can be removed from a human convalescent serum by absorption with V antigen, leaving most of the S antigen in the serum. Conversely, absorption with S antigen leaves most of the antibodies against V in the serum.

Application of the two antigens to human serums taken at various stages of mumps infection are currently reported.[6] In order to study the development of antibodies to the two antigens, serums of volunteers were titrated at intervals following experimental exposure to an oral spray containing virulent or attenuated mumps virus. In a typical experiment, 2 volunteers were sprayed with a virulent virus. In both cases, anti-S reactions were demonstrated by the twelfth day, increasing to a maximum by the eighteenth to the twentieth day. Demonstrable reactions did not appear against the V antigen till five days later in the 1 case in which parotitis developed, but appeared almost simultaneously with the S antibody in the second volunteer, who remained apparently well. The two antibodies increased to approximately the same titer by the thirtieth day. Similar delayed formation of anti-V antibody was noted in volunteers inoculated with attenuated virus, in none of whom did parotitis develop. In some of these cases the anti-V titer remained at a very low level till the end of the test (thirty-five days).

Serums from cases of the natural disease were titrated periodically only after the appearance of symptoms. During the first week of the disease the serums usually show relatively high titer anti-S reactions, with low titer or negative anti-V reactions. During the second and third weeks the two reactions tend to become equal. After this both reactions decrease in titer, the S reaction somewhat faster than the V reaction. With serums collected six months or more after the infection, anti-V exceeds anti-S, in many cases anti-S being absent. Several years after the infection no detectable antibodies may be present except those against the V antigen.

After subcutaneous vaccination in skin testing with inactivated (irradiated) mumps virus, antibodies against both antigens may develop, those against V antigen being invariably of a higher titer than the anti-S titer. Frequently only anti-V is formed.

6. Henle, G.; Harris, S., and Henle, W.: J. Exper. Med. **88**: 133, (July) 1948.

The Henles believe that the use of both V and S antigens will prove helpful in diagnosis, particularly in the absence of parotitis. A theory has not yet been suggested as to the origin and nature of the S antigen. Demonstration of the dual antigenicity of the mumps virus is a challenge to conventional theories in other virus infections.

Current Comment

THE INTERN SHORTAGE

In last year's Internship and Residency Number (THE JOURNAL, May 1, 1948), a survey of hospitals approved for intern training indicated that 20.5 per cent of internships offered by these hospitals were not filled. The highest proportion of vacancies was found in hospitals of 150 beds or less, particularly in those classified as nonteaching. The situation regarding intern vacancies remained relatively unchanged this year, with approved hospitals reporting 1,811 positions vacant as of Sept. 1, 1948, representing 19.7 per cent of those offered. In considering the discrepancy between the number of internships offered and the number of physicians available for these positions, it should be remembered that the former figure measures the demand for interns by approved hospitals and not of necessity the actual need. The Council, in the "Essentials of an Approved Internship," points out that a hospital should appoint interns in such numbers that there will be an average for the hospital of 15 to 25 beds per intern; it does not fix a specific number of internships for which a hospital is approved. Accordingly the statement that there are upwards of 9,000 "approved" internships is in a sense inaccurate. More correctly stated, there are 807 approved hospitals which offer 9,124 internships. These same hospitals next year might well decide to offer 10,000 internships or 8,000 as the case may be, thereby increasing or decreasing the relative shortage of interns. Estimates indicate that 1,380 hospitals can meet the quantitative requirements of the "Essentials of An Approved Internship" and hence have the potential to develop a program which will meet the standards for approval by the Council. If all these hospitals were to become approved, 16,000 interns would be required to staff them. Such a supply of interns is not presently available, nor is it likely to be in the near future. The majority of these hospitals, accordingly, will have to continue to render the same high type of patient care without relying on interns. As a step toward assuring the prospective intern of a satisfactory educational experience and to eliminate, as far as it can, the present situation relative to intern vacancies, the Council is now engaged in a survey of all hospitals approved for intern training. Undoubtedly the Council will remove from its list any hospital which does not meet minimum requirements for approval or which fails to provide a true educational experience for the physician during this important phase of his training.

THE GENERAL PRACTICE RESIDENCY

The "Essentials of Approved Residencies and Fellowships" as revised by the Council last December includes for the first time a residency specifically designed for the physician who intends to enter general practice. Heretofore the Council had approved hospitals for general or mixed residencies, which were training programs rather loosely organized, for the purpose of providing additional experience following the internship. All hospitals with approved intern programs were approved for general residency training under the previous "Essentials." In addition, some seventy hospitals which were unable to meet the requirements for training interns were approved for general residency training only. The listing of these hospitals under a "General Residency" category will be discontinued after the publication of this Internship and Residency Number. Hospitals previously approved under the former classification and desiring continuing approval will be expected to reorganize their programs in accordance with the new requirements. A hospital seeking approval for residency training in general practice must meet the same general requirements as does a hospital offering residency training in a specialty. Training programs of this type have already been developed in a number of teaching hospitals. One of the federal services has also set up a residency at several of its larger training centers in conformity with the new classification and has already begun to train physicians in this field. Hospitals which are able to meet the requirements for approval should give consideration to the broadening of the scope of their educational activities by offering a residency of this type. In establishing the residency in general practice, the Council recognized the demand for additional training at the graduate level by physicians who do not intend to limit their work to a specialty. The type of experience offered by the general residency was often not at a level which would attract the applicant who wanted supervised training commensurate with his experience and ability. Of necessity, these men sought appointments to residencies in the specialty fields, although many might well have been attracted to a broader type of training had more adequate facilities been available. The residency for general practice will provide supervised training in the major clinical divisions of internal medicine, surgery, obstetrics-gynecology and pediatrics, as well as in the auxiliary services of anesthesiology, pathology and radiology. On the completion of a residency of this type, the physician should be better prepared to meet the professional demands of the community in his role as the "family doctor." The program has not been developed with the thought that one or another of the specialty boards will accept it as meeting in part its training requirements. Such action would defeat the purpose of this residency, which is to encourage more young physicians to enter the field of general practice. The Council believes that this may be accomplished in part by providing facilities for training which will give the young family doctor the assurance that he has been fully trained to meet the demands on his professional competence in a large field.

MORE CHIROPRACTORS

The fountainhead of chiropractic is the school in Davenport, Iowa. At present some 1,700 young men who served in the armed forces during the war are spending three years of six months each under the GI Bill of Rights learning about chiropractic in Davenport. The federal government is paying $500 tuition per year for their training. The total amount for tuition is thus 1,700 times $1,500, which is $2,550,000. In many of the states the young men who graduate will be unable to practice the peculiar "art" and its salesmanship that they learn. Certainly chiropractic is not a science, because nothing resembling scientific evidence can be mustered to indicate that the practice of chiropractic is based on sound anatomy, physiology, pathology or any other basic medical science. In many states the chiropractors have to pass a basic science examination in order to qualify for a license. Reports indicate that a recent basic science examination in Iowa resulted in the appearance of some 500 of these young men, who sat crowded together in a room where they were given the kind of basic science examination that defeats the purpose of such legislation. One might philosophize at some length on the kind of legislation and administration under political control that results in this type of expensive farce. The facts themselves are an indictment.

SMALLPOX VACCINATION AND PREGNANCY

The report by Marjorie T. Bellows and co-workers [1] is a by-product of a study of the relation of infections and illnesses occurring during pregnancy to the incidence of abortions, stillbirths, congenital malformations, prematurity and infant deaths. All women less than four months pregnant at admission to the antepartum clinic of the Sloane Hospital for Women, in New York City, were included in the study, which was begun Oct. 1, 1946. The occurrence of 9 cases of smallpox in the spring of 1947 in New York City and the subsequent mass vaccination of an estimated 80 per cent of the total population afforded an opportunity to evaluate the effect of smallpox vaccination on the outcome of pregnancy. Of 893 pregnant women observed, 720 were vaccinated and 173 were not vaccinated. Three per cent of all pregnancies resulted in congenital malformations. The rates for women not vaccinated and for those who had primary reactions to vaccination were about equal and somewhat lower than the rates for women who did not have reaction or who had an accelerated reaction. The incidence of stillbirths varied from 2.3 per cent among women with primary takes to 4.3 per cent among women with accelerated reactions. The differences observed were not statistically significant. The infant death rates varied from 0.6 per cent among the nonvaccinated to 1.7 per cent among those with primary takes, the differences again not being significant. The authors conclude that smallpox vaccination during pregnancy does not increase the incidence of congenital malformations, stillbirths, abortions or infant deaths.

1. Bellows, M. T.; Hyman, M. E., and Merritt, K. K.: Effect of Smallpox Vaccination on the Outcome of Pregnancy, Pub. Health Rep. 64: 319-323 (March 11) 1949.

ORGANIZATION SECTION

Official Notes

REFERENCE COMMITTEES OF HOUSE OF DELEGATES

Dr. F. F. Borzell, Speaker of the House of Delegates, has appointed the following reference committees to serve in the House of Delegates at the Atlantic City Session in June:

SECTIONS AND SECTION WORK:
Roy B. Henline, *Chairman*, Section on Urology
J. W. Bird, Maryland
Charles H. Phifer, Illinois
John M. Porter, Kansas
Charles T. Stone, Section on Internal Medicine

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Howard K. Petry, Pennsylvania
Hugh P. Smith, South Carolina

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Andrew A. Eggston, New York
Hoyt B. Woolley, Idaho

THE NATIONAL CONFERENCE OF COUNTY MEDICAL SOCIETY OFFICERS

Sunday, June 5, 1949, Atlantic City, N. J.

MORNING SESSION

ROSE ROOM, HOTEL TRAYMORE

REGISTRATION—9:00 A. M.

Call to Order: A. M. MITCHELL, M.D., Chairman, Terre Haute, Ind.

Address of Welcome: E. L. HENDERSON, M.D., Chairman, Board of Trustees, American Medical Association, Louisville, Ky.

PANEL I—9:30 A. M.

IS YOUR SOCIETY PREPARED TO CARE FOR EMERGENCY CALLS?

Moderator; MR. THEODORE WIPRUD, Secretary, Medical Society of the District of Columbia, Washington, D. C.

A. An Effective Emergency Call Plan.
RALPH E. SCHMIDT, M.D., Chairman, Medical Service and Public Relations Committee, Erie County Medical Society, Erie, Pa.

B. Plans for a Small County Society.
JAMES A. BIGGINS, M.D., Chairman, Committee on Economics and Public Relations, Mercer County Medical Society, Sharpsville, Pa.

C. The 24-Hour Telephone Answering Service.
MR. J. RICHARD CONNELLY, Assistant Secretary, Medical Society of the District of Columbia.

Open Discussion

PANEL II—10:30 A. M.

DOES YOUR SOCIETY HAVE AN INDIGENT MEDICAL CARE PLAN?

Moderator: W. ANDREW BUNTEN, M.D., Cheyenne, Wyo.

A. The Maryland Medical Care Program.
DEAN W. ROBERTS, M.D., Chief, Bureau of Medical Services, Maryland State Health Department, Baltimore.

B. The Washington State Program.
MR. RALPH W. NEILL, Executive Secretary, Washington State Medical Association, Seattle.

C. A County Society Plan.
MR. MARTIN BAKER, Executive Secretary, Sedgwick County Medical Society, Wichita, Kan.

Open Discussion

V 14 1949

PANEL III—11:30 A. M.

IS YOUR SOCIETY READY FOR THE NATIONAL EDUCATION CAMPAIGN?

Moderator: FRANK J. HOLROYD, M.D., Princeton, W. Va.

A. Practical Methods of Organizing for the Campaign.
IRA H. LOCKWOOD, M.D., Chairman, Public Policy and Relations Committee, Jackson County Medical Society, Kansas City, Mo.

B. Assuming Responsibility for Community Health Problems.
MR. ROLLEN WATERSON, Executive Secretary, Alameda County Medical Association, Oakland, Calif.

C. The Preparation and Distribution of Literature.
MR. HUGH BRENNEMAN, Public Relations Counsel, Michigan State Medical Society, Lansing, Mich.

D. Coordination with the American Medical Association National Education Campaign.
A one hour question and answer period devoted to the American Medical Association National Education Campaign with representatives of Whitaker and Baxter present to assist the moderator.

EVENING SESSION

TRIMBLE ROOM, 8:00 P. M., CLARIDGE HOTEL

A. M. A. National Education Campaign.
MR. CLEM WHITAKER, Director, American Medical Association's National Education Campaign.

A Senator Views the Health Problem.
The Honorable JOHN L. MCCLELLAN, United States Senator, Camden, Ark.; Member of the "Hoover" Commission on Organization of The Executive Branch of the Government.

AIR TRAVEL DIRECT TO ATLANTIC CITY

In the item on air travel, THE JOURNAL, April 23, p. 1156, there was failure to mention that Eastern Air Lines is the only air line with direct service to Atlantic City—no necessity to change to a bus or limousine for a two hour trip from Philadelphia. Eastern Air Lines serves the greater portion of the eastern half of the United States. For further information concerning Eastern Air Lines service to Atlantic City for the annual meeting of the American Medical Association June 6-10, please communicate with E. M. Van Duzer, Advertising and Public Relations Department, Eastern Air Lines Building, 10 Rockefeller Plaza, New York 20, N. Y.

RADIO PROGRAM TO BE CONTINUED THROUGH SUMMER

Plans are being developed by the Bureau of Health Education for extension of the weekly national radio program of the American Medical Association, authorized recently by the Board of Trustees. As a result of that authorization, the series will be continued through the summer and well into the fall season. Customarily, the annual series has terminated in the latter part of June. The fifteen minute program that is carried over the National Broadcasting Company network, with more than one hundred stations presenting it locally, goes on the air at 3 p. m., central standard time, every Saturday. Introduction by Dr. W. W. Bauer of a special technic in which participants are picked up from widely separated sections of the country has met with much favorable comment. Excellent cooperation has been extended in this by state medical society officials. This procedure will be used at varying intervals throughout the series.

TELEVISION PROGRAMS

The Bureau of Health Education of the American Medical Association is presenting a series of brief television health education programs weekly over station WGN-TV, Chicago. Five minutes of a half hour program sponsored by an electrical equipment manufacturing company are devoted to consideration of subjects of interest primarily to women. Presentations have included obesity, alcoholism, rheumatism and heart disease, and among future programs will be skin disorders, child health, blood pressure and problems of aging. Visual aids employed have included charts, models and portions of motion pictures.

SURVEY OF SCHOOL HEALTH SERVICES

The secretary of each local medical society will soon receive in the mail a questionnaire on school health services in his community. The American Medical Association in cooperation with the United States Office of Education is making a survey of school health services through its Bureau of Health Education.

The United States Office of Education in Washington will concurrently query the schools. Two different questionnaires which supplement and reinforce each other and do not contain duplicate questions are being used. The information requested is needed to determine present strengths and weaknesses in school health services, to indicate needs and to point up action for the future. The questionnaire has been tested prior to printing and all unnecessary questions have been eliminated.

This project, which is actually an outgrowth of the National Conference on Physicians and Schools sponsored by the American Medical Association in 1947 at Highland Park, Ill., provides tangible evidence of the desire of the medical profession to cooperate in worth while projects designed to improve the health of school age children, as part of the American Medical Association's twelve point program for the advancement of medicine and public health.

WORCESTER (MASS.) INTERNS AND RESIDENTS PROTEST NATIONALIZED MEDICINE

The interns and residents of the Worcester City Hospital presented to Dr. N. S. Scarcello, Chairman of the Public Relations Committee of the Worcester District Medical Society, a letter relative to a recent statement made in *The Interne*, a magazine said to be the publication of the interns' organization. Apparently this organization includes relatively few interns and residents but claims to represent all.

Dr. Scarcello points out that the Worcester interns and residents oppose the statements made in *The Interne*, but they feel and he agrees that their side of the story will not be published by *The Interne*.

As their spokesman Dr. Scarcello forwards a copy of their letter plus the signatures of the interns and residents. The letter follows:

Association of Internes and Medical Students
New York, N. Y.
Gentlemen:

We, the undersigned, house officers at the Worcester City Hospital, wish to express our disapproval of the report on the A.I.M.S. Convention 1948, published in the February 1949 issue of *Interne*. We are particularly concerned with the resolution supporting a "prepaid national government-sponsored health program."

It is our considered judgment that a government-sponsored health program would be detrimental to the adequate medical care of the American people.

The endorsement of the National Health Program as expressed at the convention is not in accordance with the unanimous opinion of the house officers at this hospital. We feel that in all probability it cannot be the unanimous or even majority opinion of the house officers and medical students throughout the country.

Residents	Interns
Thomas V. Healey, M.D.	Wilfred J. Rokowski, M.D.
Robert J. Silkman, M.D.	Laurent B. Houle, M.D.
Daniel H. Callahan Jr., M.D.	Heath D. Bourdon, M.D.
James W. Dykens, M.D.	John N. Houpis, M.D.
Frank A. Slesinski, M.D.	Wallace W. Turner, M.D.
John F. Curran Jr., M.D.	Joseph M. Corcoran, M.D.
Felix G. Cataldo, M.D.	James L. Guillette, M.D.
Joseph A. Dorgan, M.D.	Paul J. Gardner, M.D.
Albert Haddad, M.D.	Robert E. Maher, M.D.
Preston W. Reynolds, M.D.	Robert L. Anderson, M.D.
Merle S. Bacastow, M.D.	Charles Atamian, M.D.
William F. MacGillivray, M.D.	Joseph A. King Jr., M.D.
Joseph F. Cafarella, M.D.	Hamilton B. Wood Jr., M.D.
Edward Kilroy, M.D.	Bradford S. Colwell, M.D.
	John M. Cummings Jr., M.D.
	Harold M. Frost Jr., M.D.
	Robert F. Kelly, M.D.
	Bernard B. Stone, M.D.
	Edward R. Callaghan, M.D.
	Harold Stein, M.D.
	Robert E. Lee, M.D.

Washington Letter

(From a Special Correspondent)

May 9, 1949.

Expansion of Voluntary Hospital System Urged

Testimony supporting greater federal appropriations for subsidization of construction of voluntary hospitals and for medical research was presented in Washington the week of May 2, opening a series of public health hearings in Congress. Witnesses appearing before subcommittees of the Senate Labor and Public Welfare Committee included Dr. George F. Lull, Dr. Albert D. Kaiser, Dr. R. H. Hutcheson, Dr. William G. Lennox and Surgeon General L. A. Scheele.

May 16 has been scheduled for the opening of extended hearings on broad health legislation, including compulsory sickness insurance as proposed by President Truman, by the Senate health subcommittee. The four bills on which testimony will be heard are: S. 1106, for supplying drugs and laboratory diagnostic services to the medically indigent; S. 1456 and S. 1581, substantially alike in principle and which provide for federal support of state-controlled medical care assistance on a voluntary basis, and S. 1679, the Truman plan for compulsory sickness insurance.

Testifying May 4 before the special Senate subcommittee of which Senator Lister Hill is chairman, Dr. Lull explained that an American Medical Association legislative committee has indorsed the intent and purposes of the hospital expansion bill (S. 614) and further action will be considered by the House of Delegates at the Atlantic City meeting.

Dr. Hutcheson, in his dual capacity as Tennessee State Health Commissioner and president of the Association of State and Territorial Health Officers, expressed approval of S. 614. He recommended, however, that the proposed law contain no rigid formula on administrative costs but, instead, that the Surgeon General have authority to determine what the figure should be, state by state.

Passage of the measure, sponsored by Senators Hill, Taft, Smith and Ellender, also was urged by Drs. Kaiser and Scheele. The former, Rochester (N. Y.) health officer and executive secretary of the Rochester Regional Hospital Council, said enactment of S. 614 would promote development of regional hospital planning. Dr. Scheele stated that it would "mark an important step forward in our nationwide effort to provide adequate hospital facilities and services for the people of this country."

Appearing May 3 before the health subcommittee, of which Senator James E. Murray is chairman, Surgeon General Scheele advised against statutory establishment of additional research institutes in special fields. Separate bills are now being considered by the committee to create such institutes for multiple sclerosis (S. 102), epilepsy (S. 659), arthritis and rheumatism (S. 705) and cerebral palsy (S. 1538). Rather, said Dr. Scheele, administrative arrangements for expanded research should be kept flexible and left to the discretion of the United States Public Health Service. Dr. Lennox, associate professor of neurology at Harvard and president of the International League Against Epilepsy, said that the greatest needs are more funds for grants-in-aid to increase research; expansion of diagnostic, treatment and training clinics; more and better special schools for persons with epilepsy and education of the public toward improvement of the sufferers' social and economic adjustment.

National Advisory Mental Health Council Meets

Meeting in Washington May 2-3, the National Advisory Mental Health Council approved a large number of applications for research and training grants. However, notification of the recipients was delayed because Congress has not completed action on the Public Health Service appropriations bill for the next fiscal year, beginning July 1, 1949. The size of the prospective grants is dependent on the funds allocated to the National Institute of Mental Health in 1949-1950. Two new members of the Council, beginning July 1, will be Dr. Franz Alexander, of Chicago, and Dr. S. Bernard Wortis, of New York City. They will take the places of Dr. William C. Menninger and Dr. John Romano, whose three year terms expire in June.

Medical Legislation

STATE LEGISLATION

California

Bill Introduced.—A. 2158 proposes to amend the penal code by adding a proviso making it a misdemeanor for any representative, agent or employee of a pundic pound to deliver or turn over to any medical school or person **any dog or cat** for experimental purposes and for any person to receive any dog or cat for experimental purposes from any public pound.

Colorado

Bill Enacted.—S. J. Mem. 4 was adopted March 28, 1949. It **memorializes the Congress** of the United States to support passage of the "Local Public Health Services Act of 1949."

Connecticut

Bill Introduced.—H. 1650 proposes to amend the act concerning commitment of **narcotic addicts** so as to include barbiturate addicts.

Florida

Bills Introduced.—H. 367 proposes to repeal a 1947 law providing that in cases of emergencies the superintendents of state institutions with the approval of the board of commissioners of state institutions may employ medical personnel from without the state and such personnel so long as employed exclusively at state institutions and so long as not engaged in private practice shall be **exempt from the requirements as to prior residence** in the state and from basic science examinations. H. 508, to amend the law relating to **naturopathy**, proposes that naturopathy shall be defined to mean the use and practice of psychologic, mechanical and material health sciences to aid in purifying, cleansing and normalizing human tissues for the preservation or restoration of health, according to the fundamental principles of anatomy, physiology and applied psychology, as may be required. Naturopathic practice shall employ and embrace the use of light, air, water, clay, heat, rest, diet, external applications, mechanical and electrical appliances, suggestotherapy, hydrotherapy, zone therapy, hygiene, first aid and sanitation; provided, however, that nothing in the act shall be held or construed to authorize any naturopathic physician to practice materia medica, surgery, chiropractic, or to treat any venereal, contagious or infectious diseases including cancer or to prescribe or administer hypnotic or narcotic drugs, nor shall the provisions of this act in any manner apply to or affect the practice of osteopathy, chiropractic, Christian Science or any other treatment authorized and provided for by law for the cure or prevention of disease. Persons licensed to practice naturopathy would be required to register their certificates annually. H. 515, H. 537, S. 307, S. 329, S. 332 and S. 347 propose laws looking to the establishment of **a new school of medicine and dentistry** in the state of Florida. These proposals would permit the school of medicine to acquire, use and dispose of cadavers for educational and scientific purposes. S. 267 proposes to make it unlawful for any person, firm or corporation filling prescriptions for the **grinding**, processing and fitting of eye glasses, lenses and frames to give or receive **a rebate to any** person, firm or corporation writing or giving prescriptions for such purposes.

Illinois

Bill Introduced.—S. 390 proposes, among other things, to **establish a division of cancer control** to promote necessary measures to reduce the mortality from cancer, heart disease and other chronic diseases.

Maine

Bill Introduced.—H. 2081, to amend the workmen's compensation act, proposes to permit injured employees to be treated by **osteopaths and chiropractors.**

Michigan

Bills Introduced.—H. C. Res. 39 proposes to memorialize the Congress of the United States to refrain from imposing on the citizens of this nation **any form of compulsory insurance or** any system of medical care designed for national bureaucratic control. H. 446 proposes that any program of **instruction in sex hygiene** in the public schools shall be administered by a person holding a teacher's certificate qualifying such person as supervisor in such field. H. 514, to amend the penal code, proposes to make it a felony for any person to wilfully administer to any pregnant woman any medicine, drug, substance or thing whatever or employ any instrument or other means whatever, with intent thereby to procure the **miscarriage of any such woman** unless the same shall be necessary to preserve the life of the woman and unless such action shall have been advised by two consulting physicians to be necessary for such purpose. S. 266 proposes to make it unlawful for any person to **compound, dispense or sell drugs**, medicines, pharmaceutical preparations, or other products which are imitations, substitutions for, or alternates of drugs, medicines, or preparations specified on a prescription of any individual licensed to write prescriptions or on the oral or written order of any such person. S. 267 proposes to amend the basic science act by **exempting chiropractors** therefrom. S. 292, to amend the medical practice act, proposes to **exempt from licensure** persons who are continuing medical education through hospital training, commonly referred to as internship or residency, and who meet all qualifications and conditions for the practice of medicine in the state, except the making of application to be registered and certified and the taking of examinations. Such person must be approved by the medical examining board for such training, must confine his training within a hospital or hospitals approved by the board, must receive no fees from any patient during the period

of training, and must not engage in such training for a period exceeding six years. S. 331 proposes an appropriation of $2,500,000 for the construction and equipment of an **outpatient medical clinic building** in connection with the university hospital and medical school.

Minnesota

Bill Introduced.—S. 1411 proposes appropriations for **nursing scholarships** in the state.

Bill Enacted.—S. 14 has become Chapter 471 of the Laws of 1949. Among other things it requires a physician having a person under his treatment for **tuberculosis** to report full particulars regarding such person to the state board of health within seven days after the date on which the diagnosis is made.

Missouri

Bills Introduced.—H. 286 proposes the enactment of a **hospital licensing law. S. 200** proposes that any person licensed by any licensing board in the state of Missouri to practice or use any science or system in treating diseases or defects of the human body who accepts, in addition to his fees or charges for professional services if any are received or made, **any rebate, commission** or any other type of payment, either directly or indirectly, in connection with the writing or filling of a prescription or formula or for any supplies the patient has been directed or advised to procure, shall be deemed to have engaged in unprofessional conduct, provided that any licensee otherwise authorized by law may prepare his own prescriptions or formulas or sell supplies for a reasonable charge.

New Hampshire

Bill Introduced.—S. J. Res. 7 proposes the creation of a committee for the purpose of studying and analyzing **hospital care and rates** to be paid by the state to hospitals for services to recipients of public assistance.

New York

Bills Enacted.—A. 578 has become Chapter 593 of the Laws of 1949. Among other things it provides for the making of a study to obtain factual evidence of the best practices and procedure desirable in carrying on a health program for the treatment and training of **children who are physically handicapped** because of cerebral palsy. A. 1871 has become Chapter 592 of the Laws of 1949. It provides that every physician shall give **notice to the health officer** of the county, city, town or village wherein such person resides of every case of cerebral palsy under his care and of all new cases of cerebral palsy of which he learns. S. 2196 has become chapter 680 of the Laws of 1949. It provides regulations for the licensing of **unincorporated hospitals and lying-in asylums.**

North Carolina

Bills Enacted.—S. 198 was ratified April 18, 1949. It authorizes and empowers the North Carolina Medical Care Commission to establish and promulgate rules and regulations fixing fair and reasonable standards whereby student physicians, dentists, pharmacists and nurses **receiving scholarship loans** under the section shall receive a credit on the principal and interest of such loan for each year or other period of time of practicing his or her profession in a rural area in the state. S. 297 was ratified April 20, 1949. It proposes that **cancer clinics** shall meet the minimum requirements of the American College of Surgeons for tumor clinics or the minimum requirements of the Division of Cancer Control of the North Carolina State Board of Health, and that each physician who shall staff such clinic must be certified by the American Board of the specialty of medicine of which he is engaged or be one who has been approved by his county medical society or its duly appointed representative and the Division of Cancer Control of the North Carolina State Board of Health.

Oklahoma

Bill Introduced.—H. 545 proposes the creation of a State Convalescent Hospital System for the purpose of providing an asylum for **medical and convalescent care for aged,** needy persons who are unable to provide for themselves without an asylum or hospital.

Oregon

Bills Enacted.—S. Res. 36 was adopted April 5. It provides for the creation of a special **committee to investigate** the various public institutions of the state with particular reference to the care, custody, training and activities of the inmates of state institutions. S. 239 was approved April 5, 1949. It provides for the promotion of medical science by the distribution and use of **unclaimed human bodies** for scientific purposes by the University of Oregon Medical School. S. 347 was approved April 4, 1949. It requires **naturopaths** to register their licenses annually and pay an **annual** registration fee of $10.

Rhode Island

Bills Introduced.—H. 906 proposes regulations for the licensing of **maternity hospitals.** S. 35 proposes the appointment of a special commission to undertake a comprehensive objective study of the **problems of alcoholism** in the state.

Tennessee

Bill Enacted.—S. 332 has become Chapter 234 of the Public Acts of 1949. It provides regulations for the organization of **nonprofit general welfare corporations** with powers to provide both hospital service benefits and medical expense indemnity benefits.

Texas

Bills Introduced.—H. 880 proposes to abolish the state **board of chiropractic examiners** as being inactive and obsolete. S. 446 proposes regulations for the **licensing of vocational nurses** and defines a vocational nurse as a person who attends or cares for the sick for compensation or hire, directly or indirectly, other than a registered nurse.

Coming Medical Meetings

American Medical Association, Atlantic City, June 6-10. Dr. George F. Lull, 535 N. Dearborn St., Chicago 10, Secretary.

American Academy of Neurology, French Lick, Indiana, French Lick Springs Hotel, June 1-3. Dr. Joe R. Brown, 19 Millard Hall, University of Minnesota, Minneapolis 14, Secretary.

American Academy of Tuberculosis Physicians, Atlantic City, Hotel Dennis, June 4. Dr. Oscar S. Levin, P. O. Box 7011, Denver 6, Colo., Secretary.

American Association of Railway Surgeons, Chicago, Drake Hotel, June 30-July 2. Dr. Chester C. Guy, 5800 Stoney Island Ave., Chicago 37, Secretary.

American Association of the History of Medicine, Lexington, Ky., Lafayette Hotel, May 23-24. Dr. Benjamin Spector, 416 Huntington Ave., Boston 15, Secretary.

American College of Chest Physicians, Atlantic City, Ambassador Hotel, June 2-5. Mr. Murray Kornfield, 500 N. Dearborn St., Chicago 10, Executive Secretary.

American College of Radiology, Atlantic City, Chalfonte-Haddon Hall, June 5. Mr. William C. Stronach, 20 N. Wacker Drive, Chicago 6, Secretary.

American Dermatological Association, Hot Springs, Va., May 25-28. Dr. Louis A. Brunsting, 102 Second Ave. S.W., Rochester, Minn. Secretary.

American Gastro-Enterological Association, Atlantic City, Claridge Hotel, June 3-4. Dr. Dwight L. Wilbur, 655 Sutter Street, San Francisco 2, Secretary.

American Gastroscopic Society, Atlantic City, Claridge Hotel, June 3-4. Dr. J. Edward Berk, 255 S. 17th St., Philadelphia 3, Secretary.

American Goiter Association, Madison, Wis., Hotel Loraine, May 26-28. Dr. Thomas C. Davison, 478 Peachtree St., N.E., Atlanta 3, Ga., Secretary.

American Laryngological Association, New York, May 16-17. Dr. Louis H. Clerf, 1530 Locust St., Philadelphia, Secretary

American Medical Women's Association, Atlantic City, June 4-5. Dr. Augusta Webster, 104 S. Michigan Ave., Chicago, Secretary.

American Neurological Association, Atlantic City, June 13-15. Dr. H. Houston Merritt, 710 W. 168th St., New York 32, Secretary.

American Ophthalmological Society, Hot Springs, Va., The Homestead, June 2-4. Dr. Maynard C. Wheeler, 30 W. 59th St., New York, Secretary.

American Orthopedic Association, Colorado Springs, May 18-21. Dr. C. Leslie Mitchell, Henry Ford Hospital, Detroit 2, Secretary.

American Otological Society, New York, May 18-19. Dr .Gordon D. Hoople, 713 E. Genesee St., Syracuse, N. Y., Secretary.

American Proctologic Society, Columbus, Ohio, May 31-June 4. Dr. W. Wendell Green, 1838 Parkwood Ave., Toledo 2, Ohio, Secretary.

American Psychiatric Association, Montreal, Canada, May 23-27. Dr. Leo H. Bartemeier, General Motors Bldg., Detroit 2, Secretary.

American Radium Society, Atlantic City, June 5. Dr. Hugh F. Hare, 605 Commonwealth Ave., Boston 15, Secretary.

American Therapeutic Society, Atlantic City, June 2-5. Dr. Oscar B. Hunter, 915 Nineteenth St. N.W., Washington, D. C., Secretary.

American Urological Association, Los Angeles, Hotel Biltmore, May 16-19. Dr. Thomas D. Moore, 899 Madison Ave., Memphis 3, Tenn., Secretary.

Association for the Study of Internal Secretions, Atlantic City, June 3-4. Dr. Henry H. Turner, 1200 N. Walker St., Oklahoma City 3, Secretary.

Idaho State Medical Association, Sun Valley, June 20-23. Dr. Alfred M. Popma, 220 N. First St., Boise, Secretary.

Illinois State Medical Society, Chicago, Palmer House, May 16-18. Dr. Harold M. Camp, 224 S. Main St., Monmouth, Secretary.

International Congress on Rheumatic Diseases, New York, Hotel Waldorf-Astoria, May 30-June 3. Dr. Philip S. Hench, Mayo Clinic, Rochester, Minn., Chairman, American Committee.

Maine Medical Association, Poland Spring, Poland Spring House, June 19-21. Dr. Frederick R. Carter, 142 Hight St., Portland 3, Secretary.

Massachusetts Medical Society, Worcester, May 24-27. Dr. H. Quimby Gallupe, 8 Fenway, Boston 15, Secretary.

New Hampshire Medical Society, Newcastle, Hotel Wentworth, June 14-15. Dr. Carleton R. Metcalf, 5 S. State St., Concord, Secretary.

North Dakota State Medical Association, Minot, May 14-17. Dr. O. A. Sedlak, 702 First Ave. S., Fargo, Secretary.

Oklahoma State Medical Association, Tulsa, Mayo Hotel, May 15-19. Mr. R. H. Graham, 210 Plaza Court Bldg., Oklahoma City, Secretary.

Society for Investigative Dermatology, Atlantic City, Ritz Carlton Hotel, June 11-12. Dr. S. William Becker, 55 E. Washington St., Chicago 2, Secretary.

Society of American Bacteriologists, Cincinnati, May 15-20. Dr. John Blair, Hospital For Joint Diseases, New York, Secretary.

Society of Biological Psychiatry, Atlantic City, Chalfonte-Haddon Hall, June 12. Dr. George N. Thompson, 1136 W. Sixth St., Los Angeles, Secretary.

South Carolina Medical Association, Myrtle Beach, May 17-19. Dr. Julian P. Price, 15 W. Cheves St., Florence, Secretary.

South Dakota State Medical Association, Yankton, May 22-24. Dr. Roland G. Mayer, 23½ S. Main St., Aberdeen, Secretary.

Southeastern Surgical Congress, Biloxi, Miss., May 23-26. Dr. Benjamin T. Beasley, 45 Edgewood Ave. S.E., Atlanta 3, Ga., Secretary.

Western Branch of American Public Health Associaiton, Los Angeles, Hotel Biltmore, May 30-June 1. Mr. Walter S. Mangold, University of California, Berkeley, Calif., Secretary.

GOVERNMENT SERVICES

ARMY

MEDICAL OFFICERS NEEDED IN MARYLAND

The Board of Civil Service Examiners, Chemical Corps, Camp Detrick, Frederick, Md., announces that a civil service examination for position of medical officer at Camp Detrick is now open to fill positions for which the salary ranges from $6,235 to $10,305 a year. No written test is required. Applicants will be rated on the basis of their training and experience as described in their applications. Information and application blanks may be obtained from the above address.

SYMPOSIUM FOR RESERVE OFFICERS AT AUGUSTA

A symposium for Medical Department reserve officers of the Third Army Area was held at Oliver General Hospital, Augusta, Ga., April 21-24. Dr. G. Lombard Kelly, Dean, University of Georgia School of Medicine, spoke on 'Mutual Cooperation Between Medical Schools and Army Hospitals in Undergraduate and Postgraduate Medical Education." Officers of the Surgeon General's Office who participated in the program were Brig. General George E. Armstrong, the Deputy Surgeon General; Col. Paul I. Robinson, Chief, Personnel Division, and Col. Charles K. Holmes, Chief, Civilian Components Division. Col. James P. Cooney, Chief, Radiological Branch, Division of Military Application, U. S. Atomic Energy Commission, and Radiological Consultant for the Office of the Surgeon General, spoke on "Medical Aspects of Atomic Energy."

HISTORY OF WORLD WARS I AND II

The long-awaited official history of the Army's effort in World War I has been completed in seventeen volumes and is in the process of printing. The first two volumes are expected to be ready for release within thirty days. The official history of World War I was not begun until after the war was over, whereas historical planning for World War II was made during that war and historians were present at the front during all combat operations. Three volumes of the history of World War II have already been released, and two other volumes are now at the printers. The official history of World War I contains many charts, maps, photographs and tables never before published. It tells the authentic story in the form of carefully selected letters, reports and other documents. A 70 page narrative summary in volume I provides an account of the principal operations on the western front following entry of the United States into the war. The basic records from which this history was written are in the National Archives in Washington, D. C.

PUBLIC HEALTH SERVICE

EXAMINATION FOR PUBLIC HEALTH NURSE

The U. S. Civil Service Commission has extended the closing date for the receipt of applications for its Public Health Nurse examination to June 30. The positions to be filled are in Washington, D. C., and vicinity; a few positions in territories and possessions of the United States may also be filled. Salaries range from $3,727 to $4,479 a year.

No written test is required. To qualify, competitors must have completed a three year nursing course or a two year nursing course plus appropriate nursing experience or education. Included in or supplementary to this education, applicants must show a minimum of 30 semester hours in an approved program of study in public health nursing. In addition, they must have had a minimum of one year's experience in public health nursing in a generalized community public health program. For positions paying $4,479, additional experience in staff nursing or supervisory experience is required. Applicants must be registered as professional nurses at the time of appointment.

Interested persons may obtain application forms from first and second class post offices, from Civil Service regional offices, or from the U. S. Civil Service Commission, Washington 25, D. C. Applications should be filed with the Commission's Washington office.

DIABETES TESTS AT THE CAVALCADE OF PROGRESS

The Monmouth County Medical Society, the New Jersey State Department of Health and the U. S. Public Health Service cooperated in presenting to the public for the first time the new diabetes blood sugar screening test, April 4-10, during the Cavalcade of Progress at Asbury Park, N. J. Twenty-five thousand persons visited the exhibits, and of those 1,300 were selected for the diabetes screening test. Only those who had eaten from thirty to ninety minutes before applying for the test were selected. The public was notably interested in the simplicity of the test and the rapid process of arriving at results. Those whose blood sugar was reported normal were so advised and went on their way. Those whose blood sugar were reported above normal were so advised by the physician in charge, and a venous sample was taken for additional analysis by the Somogyi-Nelson method of determination of blood sugar. The two tests resulted in the discovery of 49 previously unknown cases of diabetes.

Q FEVER ORGANISM VERY RESISTANT TO HEAT

The Public Health Service reports that the pasteurization of milk does not always kill the organism that causes Q fever that may be present. Studies made in the Los Angeles area in cooperation with the California State Department of Health indicate that pasteurization usually destroys the Q fever organisms in naturally infected milk, but that a few of them occasionally remain alive and apparently capable of producing the disease after pasteurization. In tests made with each of the two methods of pasteurization employed in California, the pasteurized milk from one of the vat tests still contained living Q fever organisms. Three of thirty-two specimens taken from bottles of vat-pasteurized market milk and one of four specimens of vat-pasteurized market cream were shown to contain living Q fever organisms. The studies were reported by Dr. Robert J. Huebner in the April 22 issue of *Public Health Reports*. Earlier studies had shown nearly two thirds of the dairies tested in that area produced raw milk containing the Q fever organisms (Coxiella burneti).

SYMPOSIUM ON INDUSTRIAL WASTE

A symposium on water, sewage and industrial waste will be held June 23-24 at the Department of Commerce Auditorium, Washington, D. C. The study section sponsoring this symposium is one of twenty-three groups of special consultants organized to aid the National Institutes of Health in promoting research. Inquiries concerning this symposium should be addressed to V. M. Ehlers, Texas State Department of Health, Austin, Texas, Chairman of the Sanitation Study Section.

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Medical News

(Physicians will confer a favor by sending for this department items of news of general interest: such as relate to society activities, new hospitals, education and public health. Programs should be received at least two weeks before the date of meeting.)

ALABAMA

State Medical Election.—At the recent annual session of the Medical Association of the State of Alabama, Dr. Frank C. Wilson, Birmingham, was elected president. The association does not have a president elect. Dr. William R. Carter, Repton, was chosen vice president of the Southwestern Division of the association. Dr. Douglas L. Cannon, Montgomery, continues as secretary.

ARIZONA

Personal.—Dr. C. A. Thomas, Tucson, was awarded a medal and scroll by the Pan American Congress of Tuberculosis, meeting in México, D. F., recently, for his work in chest surgery and his aid in the control of tuberculosis.

Psychiatry and Neurology Meeting.—The May meeting of the Arizona Society of Psychiatry and Neurology will be held in Phoenix May 21 in the auditorium of the Good Samaritan Nursing Home. In addition to election of officers for the coming year, Dr. John R. Green, Phoenix, and Dr. Frederick A. Gibbs, Chicago, will speak on "Electroencephalography."

COLORADO

Rocky Mountain Cancer Conference.—The third annual Rocky Mountain Cancer Conference will be held at the Shirley Savoy Hotel, Denver, July 14-15, under the sponsorship of the Colorado State Medical Society, Rocky Mountain Cancer Foundation, and the Colorado Division of the American Cancer Society. A half day will be devoted to a symposium on the leukemias. The guest speakers include Drs. George F. Cahill, New York; Sherwood Moore, St. Louis; Cecil S. O'Brien, Iowa City; Fred W. Stewart, New York; John DeJ. Pemberton, Rochester, Minn.; Frederick D. Weidman, Philadelphia; Cyrus C. Sturgis, Ann Arbor, Mich., and Idys Mims Gage, New Orleans. There is no registration fee. The conference is financed by contributed funds through the American Cancer Society.

CONNECTICUT

Personal. Dr. James C. Hart has been appointed director of the Bureau of Preventable Diseases of the Connecticut State Department of Health to succeed the late Dr. Eugene E. Lamoureux. Dr. Hart has been acting director of the bureau for the past four months. He is a graduate of Yale University School of Medicine, New Haven, and practiced medicine in New Haven from 1934 to 1940.

Dr. Talbot Appointed to Institute of Living.—In connection with a greatly expanded program for care of the sick, teaching and research, Dr. William B. Talbot, New York, has been appointed assistant to the president of the Institute of Living in Hartford. Dr. Talbot, a graduate of Tulane University of Louisiana School of Medicine, New Orleans, for the past fourteen years has been administrator of the New York Post-Graduate Medical School and Hospital in New York City. He served at the U. S. Veterans Hospital in Bronx, New York; for seven and one-half years as assistant director of Grasslands Hospital in Valhalla, N. Y., and clinical psychiatrist and director of psychiatric service to county institutions.

FLORIDA

Laboratory to Examine Vitamin Pills.—The State of Florida has established a $30,000 vitamin laboratory in the Mayo Building in Tampa to test the vitamin content of foods, pills and livestock feeds. Vincent E. Stewart, Ph.D., and Mr. Harold Hoffman will have charge of the investigations. Bread was selected as one of the first items to be tested.

Honor Two Board of Health Members.—Two members of the Florida State Board of Health staff have been honored for outstanding work in their fields. Dr. Roger F. Sondag, Jacksonville, director, Bureau of Preventable Diseases, was awarded a bronze medal by the American Cancer Society "for distinguished service in cancer control." The awards committee of the Florida Engineering Society selected David B. Lee, M.S., Jacksonville, chief sanitary engineer, for exceptional service to the engineering profession of Florida.

GEORGIA

Centennial Meeting of State Medical Association.—The Medical Association of Georgia observed the centennial of its founding at the annual meeting in Savannah, May 10-13. Guest speakers included:

William L. Benedict, Rochester, Minn., The Abner Wellborn Calhoun Lecture: Clinical Significance of Closure of the Retinal Blood Vessels.
Conrad G. Collins, New Orleans, Diseases of the Cervix.
Ralph S. McLaughlin, Charleston, W. Va., What the Medical Profession Is Doing About Your Eyes.
Catherine Macfarlane, Philadelphia, Detection of Early Cancer by Means of Periodic Examination.
Ralph M. Waters, Orlando, Fla., Anesthesiology: New Wine and Old Bottles.

The presidential address was delivered Thursday noon at a public session by Dr. Edgar Hill Greene, Atlanta, on "Our Problems at the Beginning of the Association's Second Hundred Years." Scientific and technical exhibits were on display.

ILLINOIS

Lectures for County Societies.—The Illinois State Medical Society has arranged the following lectures for county societies:

May 31, Iroquois County Medical Society in Watseka, James H. Hutton, Chicago, Hormone Preparations and Their Uses.
June 7, Bureau County Medical Society in Spring Valley, John R. Vonachen, Peoria, Modern Trends in Pediatrics.
June 9 Will-Grundy County Medical Society in Joliet, George H. Rezek, Cicero, Female Endocrines.
June 16, Effingham County Medical Society in Effingham, Archibald L. Hoyne, Chicago, The Known and Unknown in Poliomyelitis.
June 23, Will-Grundy County Medical Society in Joliet, James J. Callahan, Chicago, General Fractures.

Advantages of Small Town Practice.—The Illinois State Medical Society entertained seventy-five young interns and residents at the Hotel LaSalle, Chicago, on April 26 when three veteran small town doctors pointed out the advantages of rural practice. They explained how to set up an office and how to handle patients and other problems. Another doctor, who recently located in a small town down state, told how he solved problems with the help of neighbors. A small town banker discussed finances. The young physicians were given a list of forty rural Illinois communities in need of additional physicians. Another list contained the names of thirty country doctors who plan to retire and are looking for young physicians to replace them.

Chicago

Drs. Hektoen and Wilder Receive Ricketts Award.—The University of Chicago will honor two of its alumni May 23 when it presents the first Howard Taylor Ricketts Awards for outstanding medical work to Drs. Ludvig Hektoen, Chicago, and Russell Wilder, Rochester, Minn. The award, established by Mrs. H. T. Ricketts in recognition of outstanding medical work, will be presented annually on May 3, anniversary of the death of Dr. Howard Taylor Ricketts, who fell victim to typhus while working in this field in México, D. F., in 1910. Dr. Hektoen, chairman of the department of pathology at the university from 1901 to 1935, encouraged Dr. Ricketts in his research on typhus. Dr. Wilder, chairman of the university's department of medicine from 1929 to 1931, professor of medicine at the Mayo clinic since 1931, and now head of the department, worked with Dr. Ricketts in México. After Dr. Ricketts' death Dr. Wilder remained in Mexico to complete the work. At the presentation ceremony at the University of Chicago Clinics Dr. Wilder will speak on "Rickettsial Diseases: Discovery and Conquest."

KANSAS

State Medical Meeting.—At the annual meeting of the Kansas Medical Society in Topeka May 9-12, the guest speakers were:

Thomas T. Mackie, Winston-Salem, N. C., Tropical Disease Problems Among Veterans of World War II.
Henry K. Ransom, Ann Arbor, Mich., Inflammatory Lesions of the Intestines.
Lee E. Sutton Jr., Richmond, Va., Early Diagnosis of Poliomyelitis.
Walter A. Fansler, Minneapolis, Symptoms and Early Diagnosis of Carcinoma of the Large Bowel.
Karl H. Pfuetze, Cannon Falls, Minn., Modern Approach to Control of Tuberculosis.
Robert J. Crossen, St. Louis, Medical Gynecology.
Joseph H. Pratt Jr., Rochester, Minn., Intestinal Obstruction.
William A. Sodeman, New Orleans, Pitfalls in Antibiotic Therapy.
Paul A. O'Leary, Rochester, Minn., Dermatitis of the Hands.
William D. Gill, San Antonio, Texas, and C. Wilbur Rucker, Rochester, Minn., guest speakers at the Eye, Ear, Nose and Throat Luncheons.

Thursday afternoon's program included a Symposium on Medical Legislation, with Dr. Oscar W. Davidson, Kansas City, presiding. Round table luncheons were held each day. The speaker at the annual banquet Wednesday was Mr. Arch N.

Booth, manager, U. S. Chamber of Commerce, Washington, D. C., whose subject was "Our Freedom Can Be Lost." The Woman's Auxiliary to the society met at the auditorium May 9-12. Scientific exhibits were on display.

MASSACHUSETTS

Alumni Meeting.—The Boston University School of Medicine Alumni Association held its annual reunion May 6 at the school of medicine, Boston. Out of state speakers on the scientific sessions included Drs. Frederick F. Yonkman, Summit, N. J., and John D. Camp, Rochester, Minn.

Brigadier General Simmons Honored.—Brigadier General James Stevens Simmons, dean of the Harvard School of Public Health, Boston, has been elected chairman of the advisory medical board of the Leonard Wood Memorial (American Leprosy Foundation), and in March was awarded the Legion of Honor by the French Government in recognition of his contribution as the wartime chief of the Preventive Medicine Service of the United States Army. The presentation was made by Mr. Albert Chambon, the French Consul.

Training for Cancer Control Officers.—A program for training cancer control officers has been announced by the Harvard School of Public Health, Boston, designed to provide postgraduate training for qualified physicians and others in the planning, organization, administration and operation of cancer control programs. The program, which is being financed in part by grants from the United States Public Health Service and the Massachusetts Division of the American Cancer Society, is open to candidates for the degrees of master of public health and doctor of public health. The course will provide instruction in diagnosis, treatment and research. Training will be under the supervision of Drs. Hugh R. Leavell, head of the department of public health practice, and Leonid S. Snegireff, associate professor of cancer control at the Harvard School of Public Health. Agencies cooperating in the new program include the Harvard Medical School, the Cancer Detection Clinic of the New England Deaconess Hospital, Boston, other local hospitals, the Massachusetts Department of Public Health and the Massachusetts Division of the American Cancer Society.

MICHIGAN

Western Michigan Clinic Day.—The Kent County Medical Society is sponsoring the first Western Michigan Clinic Day at the Pantlind Hotel in Grand Rapids, May 25, beginning at 10 a. m. Among the speakers will be Drs. Elliott P. Joslin, Boston; James C. Masson, Rochester, Minn.; Walter C. Alvarez, Rochester, Minn.; Allan C. Barnes, Columbus, Ohio; Frank E. Adair, New York; Carl W. Walter, Boston, and George M. Curtis, Columbus, Ohio. There is no registration fee.

Fellowships in Public Health Engineering.—To provide field experience for graduate and undergraduate students who wish to make a career of public health engineering, the Michigan Department of Health is offering seventeen field training fellowships this summer. The program is designed to provide a reservoir of qualified sanitarians from which local health departments may draw in the future. Of the twenty-two trained in the state last year, four took permanent jobs in Michigan and the remainder returned to school. More than three hundred sanitarians have been given field experience in Michigan's local health departments in the past fourteen years. From 1934 to 1946 the W. K. Kellogg Foundation financed, supervised and conducted the program, since when the Michigan Department of Health has assumed responsibility, while the foundation furnishes the stipend for living expenses of the trainees.

Trainees will be chosen from forty-three recognized professional schools in thirty states and Canada. General training will include orientation and field observation, along with field apprenticeship in projects at schools, resorts, roadside facilities, food establishments, slaughterhouses, milk plants, milk producing farms, industries and homes. In addition, each trainee will assume responsibility for the sanitation program in an assigned area.

NEW JERSEY

Kessler Institute for Rehabilitation.—The Kessler Institute for Rehabilitation was recently opened at Pleasant Valley Way, West Orange, to operate a "bed to job" rehabilitation of severely disabled persons. Fourteen inpatients and ten outpatients were being treated, as of April 1. Future plans include an expansion of residential facilities so that women and children may be received as inpatients as well as men and so that the institute will be able to provide rehabilitation for all types of major disabilities. Dr. Henry H. Kessler, Newark, is director.

NEW YORK

Postgraduate Instruction.—The Medical Society of the State of New York in cooperation with the state department of health has arranged a postgraduate lecture for the Cayuga County Medical Society at the Owasco Country Club, Auburn, June 16 at 7 p. m., when Dr. Harold G. Wolff, New York, will speak on "Headache."

Hospital Service and Contact Committee.—The Medical Society of the County of Erie has appointed a Hospital Service and Contact Committee, consisting of one representative from each of the thirteen Buffalo Area voluntary hospitals. Each member will be charged with the duty of establishing and maintaining close working relationships between the staff of his hospital and the offices of the medical society.

Personals.—Dr. James H. Sterner, associate medical director, Eastman Kodak Company, Rochester, has been appointed consultant to the medical section of the Atomic Energy Commission on a part time basis. Dr. Sterner will continue in his present capacity with the Eastman Kodak Company.——The Order of Saint Olaf, First Degree, recently was bestowed on Dr. Kaare K. Nygaard, White Plains, by Consul General Erling S. Bent of the Royal Norwegian Consulate in recognition of his care of seamen in the Norwegian section of the hospital.

Public Health Exposition.—A Public Health Exposition will be held at the County Center in White Plains June 14-19 under the sponsorship of the Westchester Chapter of the National Foundation for Infantile Paralysis. Exhibits will be displayed in the main auditorium, and special health forums will be conducted in the Little Theatre. The exposition will be open to the public daily from noon until 11 p. m. Educational public health exhibits will be shown through the courtesy of the Cleveland Health Museum.

Public Health Intern Program.—Junior public health internships are available in the New York State Department of Health to medical students who have completed their junior year. Each intern is assigned to work under the supervision of an experienced public health physician. He performs services in accordance with his ability and training and is given independent responsibility as soon as he has demonstrated a capacity for it. The work varies in accordance with the location and type of assignment. Appointment is made to the staff of the state health department in the position of Junior Public Health Intern for an average two or three months' time. A stipend of $201 per month will be paid, as well as travel and living expenses when the intern is away from headquarters.

Cancer Teaching Day for County Societies.—A Cancer Teaching Day Program for the county medical societies comprising the Third District Branch will be held at the DeWitt Clinton Hotel, Albany, May 25, beginning at 2:30 p. m. and extending into the evening. The program is as follows:

Harry S. N. Greene, New Haven, Conn., Biological Differentiation of Malignant Tissue.
Harold W. Dargeon, New York, Cancer in Childhood.
George T. Pack, New York, Diagnosis and Treatment of Sarcomas of the Soft Parts.

Dinner reservation accompanied by a check for $4 should be made with Arthur W. Rupert, M.D., St. Peter's Hospital, Albany. The program is being presented under the auspices of the medical societies of the County of Albany and the state of New York, Albany Medical College and the state department of health.

Mental Hygiene Building Program.—Contracts totaling $3,601,205 have been awarded for construction of four infirmary buildings providing for 480 patients at Letchworth Village, Thiells, in Rockland County, one of six state schools for the mentally defective. The program includes construction of new facilities at several of the department's twenty-seven institutions, which now care for more than 98,000 resident patients. Over-all planning is designed to provide for future increases as well as for present needs. In addition to the work at Letchworth, commencement of actual building is expected soon in three other institutions. Bids have been received for construction of a 960 bed medical surgical building at Hudson River State Hospital in Poughkeepsie, a 620 bed medical surgical building and a new power plant at Buffalo State Hospital and a 768 bed medical surgical building at Binghamton State Hospital.

New York City

Address on Psychotherapy.—The Bronx Society of Neurology and Psychiatry, meeting at Morrisania City Hospital Auditorium, May 19, will hear Dr. D. Ewan Cameron, director of Allan Memorial Institute of Psychiatry, Montreal, Canada, speaking on "Behavioral Concepts in Psychotherapy." Members of the medical profession are invited.

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New York University–Bellevue Medical Center. — On an 11 acre site extending from 30th Street to 34th Street, and from First Avenue to East River Drive, the new university section of the New York University–Bellevue Medical Center will get under way this spring. Plans call for an undergraduate and a graduate medical school, a 600 bed University Hospital primarily to serve patients in the middle income brackets, and related clinics. The postgraduate medical school program has

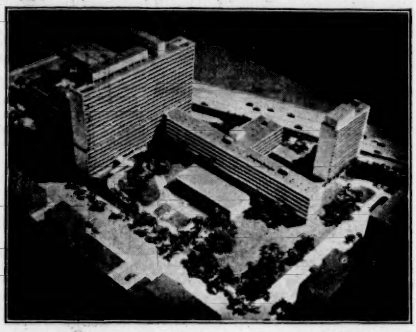

Fig. 1.—This is a photograph of the architectural model of the university section of New York University–Bellevue Medical Center. The College of Medicine and Postgraduate Medical School will be housed in the low T-shaped building of the central area. The University Hospital building is the tall one at the upper left. The university clinic and the Institute of Rehabilitation will be situated behind it. The Hall of Residence is the tall building opposite University Hospital, and the Alumni Hall Auditorium is the flat-roofed, low building in the center.

been underwritten by an $8,000,000 grant from the Samuel H. Kress Foundation. The university section of the medical center will include also the Institute of Rehabilitation, which is now in temporary quarters on East 38th Street, the Hall of Residence and the Alumni Hall Auditorium. The total estimated cost of the buildings is $32,744,000. According to Mayor O'Dwyer, the city is planning to match the university's building program by rebuilding old sections of Bellevue Hospital, which is a municipal hospital, at an expenditure of $20,000,000 to $25,000,000. The site for a new Veterans Administration

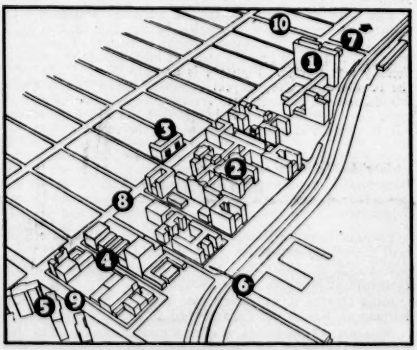

Fig. 2.—This model shows the proposed location of the buildings of the new university section of the New York University–Bellevue Medical Center: (1) new university section; (2) present Bellevue Hospital; (3) present College of Medicine; (4) Veterans Administration hospital site; (5) beginnings of Peter Cooper Village, Stuyvesant Town, Lillian Wald Houses, Jacob Riis Houses, with a total capacity of more than 40,000 persons; (6) East River Drive; (7) UN Headquarters site; (8) First Avenue; (9) East Twenty-third Street, and (10) East Thirty-fourth Street.

hospital, to be located in the area between 23rd and 25th Streets, First Avenue and Avenue A, has been approved by President Truman. New York University, as well as the medical schools of Cornell and Columbia universities, uses the clinical facilities of Bellevue Hospital, which is organized in four divisions, the third and fourth of which are known as New York University Divisions. New York University was founded in 1841 as the University Medical College. The university and Bellevue Hospital Medical College were consolidated in 1898 under university control with the name University and Bellevue Hospital Medical College. In 1935 the name was changed to New York University College of Medicine. On December 1 the New York Postgraduate Medical School and Hospital was merged with the Medical Center.

OHIO

State Medical Election.—The Ohio State Medical Association at its recent annual meeting in Columbus installed Dr. Carl A. Lincke, Carrollton, as president and chose Drs. Ernest O. Swartz, Cincinnati, as president elect and Henry P. Worstell, Columbus, as treasurer. The 1950 annual meeting will be held in Cleveland the week of May 14.

Seminar in Medical Gynecology and Urology. — The Society of General Physicians, Cincinnati, in collaboration with the University of Cincinnati College of Medicine, is offering for general practitioners a seminar in medical gynecology and urology from May 3 to May 26. Lectures are given Tuesday and Thursday mornings in Room 110 of the College of Medicine. The fee for the series is $15.

RHODE ISLAND

Personal.—Dr. Robert J. Williams of Providence has been appointed director of laboratories at the new Providence Veterans Hospital. Dr. Williams, a specialist certified by the American Board of Pathology, has been associate pathologist at Rhode Island Hospital. He served in the Medical Corps of the Navy during the recent war.

Annual Meeting of State Society.—The Rhode Island Medical Society held its annual meeting May 11-12 at the Rhode Island Medical Society Library, Providence, under the presidency of Dr. Joseph C. O'Connell, Providence. Out of state physicians on the program included:

John M. Fallon, Worcester, Mass., Endometriosis. The General Practitioner and the General Surgeon.
Walter C. Alvarez, Rochester, Minn., Puzzling Functional Syndromes.
Ernest B. Howard, Chicago, The A.M.A. and the State Medical Societies.
Tom D. Spies, Birmingham, Ala., Recent Advances in Nutrition.
Dwight E. Harken, Boston, Surgery of the Aorta and Cardiac Valves.
Arthur P. Stout, New York Lymphosarcoma and Hodgkins Disease.
Samuel Proger, Boston, Some Dietary Factors in Cardiovascular Disease.

The Woman's Auxiliary to the association met at the Plantations Club in Providence. Technical exhibits were on display.

GENERAL

Jefferson Alumni Supper.—The Jefferson Medical College Alumni Association will hold a buffet supper and smoker on the evening of June 8 at the Hotel Traymore, Atlantic City, N. J., in the American Room. The announcement of a luncheon for the alumni in THE JOURNAL, April 30, page 1162, was in error.

Investigative Dermatology.—The Society for Investigative Dermatology will hold its annual meeting at the Ritz-Carlton, Atlantic City, N. J., June 11-12. There will be four scientific sessions. The presidential address opening the scientific sessions will be given by Dr. Stephen Rothman, Chicago, on "Basic Research in Dermatology." The dinner will be held Saturday evening at 7 p.m.

Special Society Meeting.—The American Otorhinologic Society for the Advancement of Plastic and Reconstructive Surgery, Inc., will hold its annual meeting at the Chalfonte-Haddon Hall, Atlantic City, June 6 beginning at 5 p.m. The dinner session will be held in honor of Drs. John MacK. Brown, Los Angeles; Thomas C. Galloway, Evanston, Ill., and Westley M. Hunt, New York, honorary fellows. The two papers on the scientific program will be presented at the evening session.

Chest Physicians' Annual Meeting.—The American College of Chest Physicians will hold its annual meeting at the Ambassador Hotel, Atlantic City, June 2-5, under the presidency of Dr. Richard H. Overholt, Boston. The program includes an X-Ray Conference on Saturday afternoon and a Conference on Medical Education on Sunday. Round Table Luncheons, limited to twenty to thirty persons each, are scheduled for Friday, Saturday and Sunday. The convocation, social hour and annual president's banquet will begin Saturday at 6 p.m.

Women's Clubs Oppose Compulsory Health Insurance.—Delegates to the annual convention of the General Federation of Women's Clubs, which has a membership of 5,000,000 in the United States, adopted unanimously April 28 a resolution which opposed "government control of health services" and supported "the extension and development of Voluntary Health Insurance." The resolution states that the federation "goes on record against Government control of health services which would jeopardize free enterprise, establish heavy new tax burdens and unprecedented National deficits, and infringe upon the powers of the individual states."

Annual Meeting of Laryngological Association.—The American Laryngological Association will hold its annual meeting at the Biltmore, New York, May 16-17, under the presidency of Dr. Frederick T. Hill, Waterville, Maine. Those speaking by invitation include:

Abraham White, Ph.D., New Haven, Conn., Factors Influencing the Growth of Lymphoid Tissue.
Joseph C. Doane, Philadelphia, An Internist Looks at Specialism.
Norman L. Hoerr, and Julius W. McCall, Cleveland, Changes in the Nasal Mucosa Following Laryngectomy.
Joseph C. Aub, Boston, Advances in Our Knowledge of Cancer.

The President's Reception followed by the banquet will be held Monday evening at 6 p.m.

Dr. Doull Appointed to Leonard Wood Memorial.—Dr. James A. Doull, Washington, D. C., medical director, United States Public Health Service, has been made medical director of the Leonard Wood Memorial (American Leprosy Foundation), succeeding Dr. H. Windsor Wade, Culion, Philippine Islands, who because of ill health has been relieved of administrative duties and appointed associate medical director. Dr. Wade will continue his pathologic studies at Culion, and the editorship of the *International Journal of Leprosy*. The headquarters of the medical department of the memorial has been transferred from Culion, P. I., to 1832 M. Street, N. W., Washington 6, D. C. Cable address: Woodmem, Washington.

American Dermatological Association.—The annual meeting of the American Dermatological Association, Inc., will be held May 25-28 at the Homestead, Hot Springs, Va. The presidential address will be delivered by Dr. Harry R. Foerster, Milwaukee. Among the subjects to be presented will be Relation of Sunlight, Complexion and Heredity to Carcinogenesis of the Skin, Hormones in Acne: A Clinical Evaluation of Their Use in Adolescent Women; Effects of Podophyllin on Basal-Cell Epithelioma and on Seborrheic, Senile, X-Ray, and Radiation Keratoses; Treatment of Syphilis with Aureomycin Given Orally, and Hiroshima: Three Years After. A symposium on Undergraduate Teaching in Dermatology, with Dr. Francis E. Senear, Chicago, as moderator will be presented Wednesday afternoon.

Psychiatric Association Meeting in Montreal.—The American Psychiatric Association will hold its annual meeting at the Windsor and Mount Royal hotels in Montreal, Canada, May 23-27. The program includes, among others, the following invited speakers:

Wilder G. Penfield, Montreal, Canada, Psychical Seizures and Psychoparetic Automatism.
Herbert H. Jasper, Westmount, Quebec, Electroencephalogram in Epileptic Automatisms and Equivalent States.
Francis L. McNaughton, Montreal, Medical Therapy in Relation to the Classification of the Epilepsies.
C. Bos and H. Lehmann, Montreal, Studies on Psychiatric Patients Undergoing Nitrous Oxide Treatments.
John A. Belisle, Eloise, Mich., Necessity of the "Calculated Risk" in Parole Policy.
William T. Dixon, New York, Sludged Blood Studies in Alcoholics and Other Psychiatric In-Patients.
William W., a Co-Founder, The Society of Alcoholic Anonymous.
Lela S. Anderson, R.N., New York, Human Factors Involved in Providing Better Nursing Treatment and Care of Patients in Mental Hospitals.
Mr. Howard Hanson, Rochester, N. Y., Effective Power of Consonance and Disconsonance in Music.
Fritz Redl, Ph.D., Detroit, Dynamics of Group Therapy.
Howard A. Rusk, New York, America's No. 1 Problem—Chronic Disease and an Aging Population.
Kenneth G. Gray, Toronto, Canada, Psychiatric Evidence in Criminal Cases.
Hudson Hoagland, Ph.D., and Gregory Pincus, Sc.D., Worcester, Mass., Adrenal Cortical Responses to Stress in Normal Men and in Those with Personality Disturbances.
Robert A. Cleghorn and B. F. Graham, Ph.D., Montreal, Studies of Adrenal Cortical Activity in Psychoneurotic Subjects.
Meta A. Neuman, M.S., Washington, D. C., Pick's Disease.
Winifred Ashby, Ph.D., Washington, D. C., An Approach to the Solution of Mental Disfunction Through Brain Enzyme Studies.
Charles Kligerman, Chicago, Characterological Observations in Neurodermatitis.

Several symposiums have been scheduled: Monday, Role of Psychoanalysis in Various Aspects of Medical Education and Symposium for Hospital Administrators; Tuesday, Symposium on Alcohol; Wednesday, United States Public Health; Friday, State Public Health, Veterans Administration Symposium and Medical Testimony in Court. Round table dinner meetings will be held. Prof. David Thomson, Ph.D., McGill University, Montreal, will give the dinner address Wednesday evening on "Caries in the 'Ivory Tower.'" Motion pictures will be shown daily.

LATIN AMERICA

Guatemala Hospital Program.—Guatemala has begun a national hospital building program designed to create an integrated system of sixty-seven hospitals to provide a minimum level of adequate hospital facilities. The Guatemala Institute of Social Security, an autonomous body, will implement and control the program expected to be realized in fifteen to twenty years at a cost of $25,000,000 to $30,000,000. The system will revolve around a central hospital with 1,000 beds in Guatemala City, and will involve five other regional hospitals with 200 to 300 beds, seventeen departmental hospitals with 75 to 200 beds and forty-four rural hospitals with 30 to 50 beds. The central hospital, to be known as Roosevelt Hospital, is nearly completed. It was constructed at a cost of $4,000,000, of which 45 per cent was a grant from the Institute of Inter-American Affairs.

Mexican Congress of Obstetrics and Gynecology.—The first Congress of Obstetrics and Gynecology of Mexico will be held in the Justo Sierra Auditorium and the Hotel de Prado, México, D. F., May 22-28. The scientific sessions will be divided into five groups: surgical gynecology; medical gynecology and endocrinology; infertility and sterility; obstetrics; and laboratory investigations, radiology and physiology. The program includes invited speakers from Argentina, Brazil, Cuba, Colombia, Chile, France, Panama, Peru, Uruguay, Venezuela, Spain and the United States and Mexico. Guests from the United States include Drs. Richard W. TeLinde, Baltimore; Arthur T. Hertig, Boston; M. Edward Davis, Chicago; B. Bernard Weinstein, New Orleans, and Edwin C. Hamblen, Durham, N. C. The congress is open for registration to interested physicians throughout the world. The secretaries are Dr. Carlos D. Guerrero and Dr. Alphonso Bravo, Marsella 11, México, D. F., of whom inquiries can be made.

CORRECTIONS

Lithium and Cesium.—In the editorial note in THE JOURNAL, March 12, page 692, the statement that lithium is the most reactive metal known is erroneous. Cesium, a member of the same family of metals as lithium, is considered to be the most reactive.

Proctologic Society Meeting.—Dr. Harry E. Bacon, Philadelphia, is president of the American Proctologic Society holding its annual meeting in Columbus, Ohio, May 31-June 4, and not Dr. Albert G. Shutte, Milwaukee, as stated in THE JOURNAL, April 30, page 1288. Dr. Shutte is vice president.

The Use of Streptomycin in Surgical Patients.—The illustrations appearing in the article by this title in THE JOURNAL, April 2, page 902, were partially incorrect. Figure 5, on page 904, is actually figure 4 and was made before streptomycin therapy was started. Figure 4 is actually figure 5 and shows the results after streptomycin therapy. Figure 6 is correctly labeled, but the photographer reversed the negative, so that the right side of the chest, which in figures 4 and 5 is to the reader's left, in figure 6 is incorrectly shown on the reader's right.

Marriages

THOMAS BUERGER WRIGHT, Cincinnati, to Miss Florie Elizabeth Kelly of Jacksonville, Fla., March 27.

WILLIAM A. VIELE JR., Seattle, to Miss Sarah Catherine Hargrove at Houston, Texas, March 19.

JOHN DEAVER ALEXANDER, New York, to Miss Helen King Kleberg in Kingsville, Texas, April 16.

WILLIAM J. BROWN JR., Cedar Rapids, Iowa, to Miss Jean Rowe of Galesburg, Ill., March 13.

HUGH STEVENS COLQUITT to Miss Beulah Nelson Dowda, both of Smyrna, Ga., March 9.

NORMAN DEANE, Newark, N. J., to Miss Elaine Rudnick of New York, March 10.

M. EUGENE FLIPSE JR., to Miss Carolyn Law, both of Miami, Fla., in March.

HARRY MANDELBAUM, Brooklyn, to Miss Rose Lader of New York, April 3.

R. A. ABRAHAM, Brooklyn, to Miss Laurette Weiss of New York, February 20.

Deaths

Harold Laurens Dundas Kirkham, Houston, Texas; born in Norfolk, England, March 24, 1887; University of Texas School of Medicine, Galveston, 1909; specialist certified by the American Board of Surgery and the American Board of Plastic Surgery; past president, vice president and trustee of the American Association of Oral and Plastic Surgeons; fellow of the Southern Surgical Association and the Texas Surgical Society, of which he had been president; member of the American Association for the Surgery of Trauma, the American Society of Plastic and Reconstructive Surgery and the American Medical Association; fellow of the American College of Surgeons; served in the Navy during World War I; recalled to active duty in December 1941 and appointed to the rank of captain in 1942; head of the department of plastic surgery for the U. S. Naval Hospital in San Diego from July 20, 1943, to March 3, 1945; in April 1946 awarded the Legion of Merit; received a commendation from the Surgeon General of the Navy for outstanding devotion to duty following the Texas City Disaster on April 16, 1947; at the time of his retirement on Oct. 1, 1947 was chief of plastic surgery at the U. S. Naval Hospital; affiliated with St. Joseph's Infirmary, Memorial Hospital, Jeff Davis Hospital and the Southern Pacific Hospital; died March 18, aged 62, of coronary thrombosis.

Victor Francis Cullen ✠ Baltimore; born in Williamsport, Md., Sept. 5, 1881; Johns Hopkins University School of Medicine, Baltimore, 1906; specialist certified by the American Board of Internal Medicine; member of the American College of Chest Physicians and the American Trudeau Society, of which he had been director and vice president; past president of the Southern Tuberculosis Conference and the National Tuberculosis Association; formerly vice president of the Medical and Chirurgical Faculty of Maryland; past president of the Maryland Tuberculosis Association; in 1947 retired as superintendent of the Maryland State Tuberculosis Sanatorium and of all Maryland tuberculosis sanatoriums; in 1924 had been awarded the Knighthood of St. Gregory by Pope Pius XI, in recognition of work in tuberculosis in Maryland; died in the Union Memorial Hospital March 9, aged 67, of hypertensive cardiovascular disease.

Arthur Nathaniel Alling, New Haven, Conn.; born in New Haven, July 1, 1862; College of Physicians and Surgeons, medical department of Columbia College, New York, 1891; member of the American Medical Association and the American Ophthalmological Society; fellow of the American College of Surgeons; joined the Yale University School of Medicine in 1893 as lecturer in ophthalmology; in 1894 became an instructor, in 1902 clinical professor and in 1938 professor emeritus; for many years affiliated with the New Haven Dispensary; on the staffs of the New Haven and Meriden hospitals; died March 15, aged 86, of coronary occlusion.

Samuel Kennedy ✠ Shelbyville, Ind.; born in Shelbyville, Ind., March 16, 1867; Medical College of Indiana, Indianapolis, 1891; an Associate Fellow of the American Medical Association; also a graduate in pharmacy; past president of the Shelby County Medical Society; formerly vice president of the Indiana State Medical Association and for many years a councilor of the Sixth District; in 1900, 1910, 1930 and 1940 a delegate to the U. S. Pharmacopoeial Convention in Washington, D. C.; for many years surgeon for the New York Central Railroad and the Pennsylvania Railroad; died February 1, aged 81, of cerebral hemorrhage.

Thomas Joseph Donovan ✠ Houston, Texas; born in Eden Valley, Minn., July 19, 1909; Harvard Medical School, Boston, 1934; assistant professor of clinical pediatrics at the Baylor University College of Medicine; specialist certified by the American Board of Pediatrics; certified by the National Board of Medical Examiners; member of the American Academy of Pediatrics; served during World War II; on the staffs of the Hermann, Jefferson Davis and Memorial hospitals and St. Joseph's Infirmary, where he died March 4, aged 39, of cancer of the liver.

Henry Tate Allingham, Omaha; John A. Creighton Medical College, Omaha, 1912; member of the American Medical Association; affiliated with Creighton Memorial St. Joseph's Hospital, Doctors Hospital and St. Catherine's Hospital; died March 13, aged 69.

John T. Anderson ✠ Warrensburg, Mo.; Missouri Medical College, St. Louis, 1889; died February 22, aged 79, of pneumonia.

Jeannie Oliver Arnold, Laguna Beach, Calif.; Boston University School of Medicine, 1891; formerly physician for Pembroke College in Providence, R. I.; died in St. Joseph Hospital, Orange, February 20, aged 88, as the result of a fall.

William Abraham Bostick, Milledgeville, Ga.; University of Georgia Medical Department, Augusta, 1924; member of the American Medical Association; past president of the Baldwin County Medical Society; on the staff of Milledgeville State Hospital; died February 2, aged 68, of cerebral hemorrhage.

Arthur George Davis ✠ Erie, Pa.; University of Buffalo School of Medicine, 1913; specialist certified by the American Board of Orthopaedic Surgery; member and formerly vice president of the American Academy of Orthopaedic Surgeons; member of the American Orthopaedic Association; fellow of the American College of Surgeons; on the staffs of the Hamot and St. Vincent's hospitals and Zem Zem Hospital for Crippled Children; died February 20, aged 61, of coronary disease.

Earl John Dorwaldt ✠ Albany, N. Y.; Albany (N. Y.) Medical College, 1924; associate professor of hygiene at the New York State College for Teachers; died in St. Peter's Hospital February 7, aged 51, of rheumatic heart disease.

Holly T. Drake, Marion, Ill.; Kentucky School of Medicine, Louisville, 1898; died in Holden Hospital, Carbondale, February 11, aged 82, of cerebral thrombosis and diabetes mellitus.

William Preston Drake, Bowling Green, Ky.; Kentucky University Medical Department, Louisville, 1905; member of the American Medical Association; for many years oculist for the Louisville and Nashville Railroad; died in Atlanta, Ga., February 10, aged 66, of coronary thrombosis.

Arthur Garfield Dula, Lenoir, N. C.; Leonard Medical School, Medical Department of Shaw University, Raleigh, 1912; died February 14, aged 65, of a heart attack.

Oswald Alfonso Eaddy ✠ Keithville, La.; Atlanta Medical College, 1914; died in Phoenix, Ariz., February 27, aged 57, of cerebral hemorrhage and heart disease.

Kiefer Killen Eason, Tulsa, Okla.; Baylor University College of Medicine, Dallas, Texas, 1926; served during World War I; affiliated with Hillcrest Memorial Hospital, where he died February 22, aged 50, of subacute yellow atrophy of the liver and virus hepatitis.

Crum Epler ✠ Pueblo, Colo.; University of Tennessee Medical Department, Nashville, 1894; member of the House of Delegates of the American Medical Association in 1908, 1932, 1933 and 1934; past president of the Colorado State Medical Society; served during the Spanish-American War; fellow of the American College of Surgeons; served on the staff of St. Mary Hospital; died February 6, aged 77, of cerebral hemorrhage.

Jack Wallace Ferguson, Ceredo, W. Va.; Ohio State University College of Medicine, Columbus, 1921; member of the American Medical Association; died February 5, aged 52, of acute dilatation of the heart.

Ignatius L. J. Fitzpatrick, Philadelphia; Medico-Chirurgical College of Philadelphia, 1901; formerly on the board of health; served on the staff of Philadelphia General Hospital; died February 16, aged 70, of carcinoma of the urinary bladder.

Harry Pugh Forsyth ✠ Alexandria, La.; Tulane University of Louisiana School of Medicine, New Orleans, 1929; past president of the Rapides Parish Medical Society; consultant for the state board of health; on the staff of the Huey P. Long Charity Hospital in Pineville and Baptist Hospital, where he died March 12, aged 51, of coronary occlusion and a fracture of the first lumbar vertebra received in an automobile accident in October 1948.

Benno Hugh Fultz ✠ San Antonio, Texas; College of Physicians and Surgeons, Baltimore, 1901; on the staff of Santa Rosa Hospital; died February 15, aged 74, of arteriosclerosis.

Cecil Hughes Gilliam, Galveston, Texas; University of Texas School of Medicine, Galveston, 1939; member of the American Medical Association; served during World War II; died February 16, aged 38, of coronary occlusion.

Edmund Francis Hanlon ✠ Hazleton, Pa.; Jefferson Medical College of Philadelphia, 1927; served during World War II; died February 16, aged 45, of coronary occlusion.

Oliver L. Iden ✠ Chillicothe, Ohio; Eclectic Medical Institute, Cincinnati, 1899; past president of the Ross County Medical Society; on the staff of Chillicothe Hospital; died February 6, aged 74, of heart disease.

Joseph Kahn ✠ Milwaukee; University of Pennsylvania Department of Medicine, Philadelphia, 1888; member of the staff of Mount Sinai Hospital; died February 20, aged 82, of coronary occlusion.

Orson Arza Kellogg, Beloit, Wis.; Rush Medical College, Chicago, 1899; died in the Veterans Administration Hospital, Tomah, February 28, aged 76, of coronary heart disease and bronchopneumonia.

Rufus S. Kight ✠ Norfolk, Va.; University of Maryland School of Medicine, Baltimore, 1900; fellow of the American College of Surgeons; past president of the Norfolk County Medical Society; formerly city coroner; affiliated with Norfolk General Hospital, Leigh Memorial Hospital and the St. Vincent De Paul Hospital, where he died February 12, aged 72, of heart disease.

Joseph H. Kinsey, Richmond, Ind.; Physio-Medical College of Indiana, Indianapolis, 1888; member of the American Medical Association; died February 14, aged 82, of congestive heart failure.

Grover Cleveland Klein ✠ Galesburg, Ill.; Rush Medical College, Chicago, 1912; served during World War I; member of the staff of Galesburg Cottage Hospital; died January 30, aged 64, of coronary heart disease.

Jerome Henry Leadley ✠ Rochester, N. Y.; University of Rochester School of Medicine and Dentistry, 1930; on the staffs of the Rochester General Hospital and the Strong Memorial Hospital, where he died February 24, aged 44, of atelectasis, following an operation for esophageal ulcer.

William McCombs, Philadelphia; Jefferson Medical College of Philadelphia, 1882; for many years affiliated with Wills Hospital; died in the Temple University Hospital January 30, aged 88.

John William McCreery ✠ Whittemore, Iowa; Drake University Medical Department, Des Moines, 1898; died February 2, aged 71, of coronary occlusion.

Orville Johnson Mason, Macedon, N. Y.; Columbian University Medical Department, Washington, D. C., 1899; member of the American Medical Association; died in Canandaigua, February 23, aged 87, of pulmonary edema due to cardiovascular disease.

John Perry Merchant, Columbus, Ohio; Ohio Medical University, Columbus, 1902; died in St. Francis Hospital February 10, aged 70, of encephalomalacia of the midbrain due to thrombosis.

Dan Hazen Moulton ✠ Chico, Calif.; Medical Department of the University of California, San Francisco, 1902; an Associate Fellow of the American Medical Association; in charge of the health department of the Chico State College; affiliated with Enloe Hospital, where he died February 10, aged 70, of cerebral hemorrhage.

Arthur Stone Needles, Lima, Mont.; University of Michigan Department of Medicine and Surgery, Ann Arbor, 1911; member of the American Medical Association; served during World War I; died in Salt Lake City February 23, aged 63.

Dorwin Lewis Palmer ✠ Santa Barbara, Calif.; University of Oregon Medical School, Portland, 1915; formerly associate clinical professor of radiology at his alma mater; specialist certified by the American Board of Radiology; member of the American Roentgen Ray Society; on the staff of Multnomah Hospital; died December 27, aged 60.

George Parke ✠ Viola, Wis.; College of Physicians and Surgeons of Chicago, School of Medicine of the University of Illinois, 1905; died February 22, aged 67, of acute coronary thrombosis and arteriosclerosis.

Ernest Lawrence Parker, Cohasset, Mass.; Harvard Medical School, Boston, 1904; member of the American Medical Association; died January 18, aged 70.

Claude Lee Penington ✠ Macon, Ga.; University of Georgia Medical Department, Augusta, 1912; specialist certified by the American Board of Otolaryngology; senior attending ear, eye, nose and throat service, Macon Hospital, where he was chairman of the executive committee; on the staff of the Middle Georgia Hospital; formerly member of the Macon hospital commission; died in the University Hospital, Augusta, February 21, aged 57, of carcinoma of the stomach.

Frank Ellsworth Peters ✠ Winnetka, Ill.; Rush Medical College, Chicago, 1929; died in Sarasota, Fla., February 15, aged 48, of chronic glomerular nephritis, erysipelas, hypertension and congestive heart failure.

Otto Andrew George Reinhard ✠ Lincoln, Neb.; University of Illinois College of Medicine, Chicago, 1923; specialist certified by the American Board of Internal Medicine; fellow of the American College of Physicians; formerly field director of the Siamese public health department; on the staffs of Bryan Memorial and Lincoln General hospitals; died February 12, aged 51, of coronary occlusion.

George Lewis Ross, Edinburg, Texas; Marquette University School of Medicine, Milwaukee, 1914; member of the American Medical Association and the State Medical Society of Wisconsin; died February 26, aged 64, of cerebral hemorrhage.

Harold Augustine Ryan, Miami Beach, Fla.; Columbia University College of Physicians and Surgeons, New York, 1929; member of the American Medical Association; died February 25, aged 43, of coronary thrombosis.

Harry William Schumacher ✠ Altamont, Ill.; Washington University School of Medicine, St. Louis, 1917; served during World War I; died in the Mark Greer Hospital, Vandalia, February 18, aged 58, of coronary thrombosis.

James R. Spears, New Orleans; Flint Medical College of New Orleans University, New Orleans, 1902; died in the Flint Goodridge Hospital of Dillard University, February 18, aged 74.

Roy George Spurbeck, Cloquet, Minn.; Northwestern University Medical School, Chicago, 1911; died February 12, aged 59, of myocarditis.

Amos Osborne Squire, Ossining, N. Y.; Columbia University College of Physicians and Surgeons, New York, 1899; member of the American Medical Association; medical examiner of Westchester County from 1925 to 1948; coroner of Westchester County from 1906 to 1912; served as health officer of Ossining and as physician at Sing Sing Prison; died February 11, aged 72, of cerebral arteriosclerosis and coronary thrombosis.

William Henry Stackable, Chicago; University of Michigan Department of Medicine and Surgery, Ann Arbor, 1903; member of the American Medical Association; on the staff of St. Anne's Hospital; died February 8, aged 74, of arteriosclerotic heart disease.

Frederic Tupper Stearns, Osage, Iowa; State University of Iowa College of Medicine, Iowa City, 1942; member of the American Medical Association and of the Iowa State Medical Association; died in Mason City February 17, aged 33, of injuries received in an automobile accident.

James Gardner Strickland, Shamokin, Pa.; Jefferson Medical College of Philadelphia, 1913; served during World War I; member of the American Medical Association; formerly affiliated with the Shamokin (Pa.) State Hospital; died February 28, aged 61, of coronary occlusion.

George Linton Touchton, Savannah, Ga.; Atlanta School of Medicine, 1909; member of the American Medical Association; past president of the Georgia Medical Society; served during World War I; chief medical examiner of a draft board during World War II; formerly county physician; member of the staffs of St. Joseph and Warren A. Candler hospitals; died February 4, aged 64, of coronary occlusion.

John Edward Vallee, Van Nuys, Calif.; University of Vermont College of Medicine, Burlington, 1903; member of the American Medical Association; died February 13, aged 77, of cardiovascular renal disease.

Paul Reichard Webster ✠ Leavenworth, Kan.; University of Kansas School of Medicine, Kansas City, 1922; on the staffs of Cushing Memorial and St. John's hospitals; died February 16, aged 51, of cerebral hemorrhage.

Francis Myron West, Lovelock, Nev.; College of Physicians and Surgeons of San Francisco, 1905; served during the Spanish-American War; died in the Veterans Administration Center, Reno, February 22, aged 76, of arteriosclerosis.

George B. Williamson, Joplin, Mo.; Missouri Medical College, St. Louis, 1887; died February 22, aged 82, of coronary thrombosis and diabetes mellitus.

Alfred Wolff, Brooklyn; Universität Heidelberg Medizinische Fakultät, Baden, Germany, 1909; member of the American Medical Association; died February 22, aged 63, of congestive heart disease.

Charles Wolff ✠ St. Louis; St. Louis University School of Medicine, 1924; died in St. John's Hospital February 27, aged 53, of heart disease.

William S. Workman, Indianapolis; Louisville (Ky.) Medical College, 1891; member of the American Medical Association; died in Flower Mission Hospital February 13, aged 91, of pulmonary tuberculosis.

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Foreign Letters

NETHERLANDS

(From Our Regular Correspondent)

March 21, 1949.

Professor Pijper and the Bacterial Flagella

Professor Adrianus Pijper, director of the well equipped South African Institute of Pathology of the Medical Faculty, Pretoria—rather recently the *Lancet* gave a description of it—is always in close contact with his country, Holland, and never fails to send his microbiologic films to be shown in meetings of the Netherlands Microbiological Society.

Pijper's latest motion picture illustrates his theory that the flagella of bacteria do not affect the locomotion of these microbes any more than the tail of a dog affects the locomotion of this mammal. According to him the bacteria move because their bodies can make an undulating, gyrating movement. Although the spectators unanimously enjoyed the high standard of this new product of Professor Pijper's camera, it was extremely difficult to accept the theoretic view of the distinguished microbiologist from South Africa.

Kingma Boltjes made himself the interpreter of those who did not agree with Pijper, and to the observations made by Orskow, Kaufmann and others he added a few of his own. According to Boltjes even the film clearly shows that the flagella do not consist of lifeless slime matter, but are gyrating at a speed much greater than could be caused by the movement of the bacterial bodies or by currents.

Kingma Boltjes published his remarks in the Netherlands journal of microbiology and serology *Antonie van Leeuwenhoek*. Among the excellent illustrations of his short article one finds a fine picture made by Miss W. van Iterson, engineer (Netherlands Institute for Electron Microscopy at Delft). This electron photograph most convincingly shows that flagella are no artefacts, but organs of the bacterial body.

Epidemic of Lobar Pneumonia

During the war a general practitioner, Dr. F. J. Huygen, made an interesting study of an epidemic of lobar pneumonia observed by him in his country practice not far from Arnhem.

During his three years' study Dr. Huygen counted 104 cases, of which hardly any occurred during the summer months, whereas a maximum was reached in the early spring. Most cases were single ones, and this sporadic spreading seemed to be favored by crowding (large families and bad social environment).

The bacteriologic analysis made in the Hygienic Institute of the University of Utrecht (Professor Julius) revealed Pneumococcus type I to be the prevalent type. The same microbe was found circulating among the healthy part of the population in a high percentage (25 per cent), quite uncommon for this type of pneumococcus.

In his publication (academic thesis) Dr. Huygen finds some analogy with meningococcosis, which disease is also characterized by an outbreak of sporadic cases after the "danger line" of a high percentage of carriers has been reached.

A Cancer Healer

The Minister for Social Affairs charged the President of the Public Health Council to report to him about Dr. Jules Samuels (Amsterdam), who for many years has claimed to cure malignant tumors by a short wave treatment of the hypophysis.

Although Dr. Samuels refused to cooperate, the reporter succeeded in tracing about 70 patients who were treated in the Samuels Institute. He found that in 30 patients, who, according to Samuels, were suffering from cancer, the diagnosis could not be confirmed by any specialist. In the other cases, all confirmed by specialists, Samuels's treatment had failed. This inquiry explains how it has been possible for Samuels to organize demonstrations of quite a number of "cured cancer patients" for colleagues on several occasions.

The medical profession is anxious to know how the Government will handle this unpleasant affair. In his report the President of the Public Health Council has declared that a physician who publicly claims that he can cure cancer and who is not able to do so "undermines the faith in the medical profession."

Vital Statistics

The "Centraal Bureau voor de Statistiek" (The Hague) lately published the first vital statistics of the year 1948.

In many respects this third year after the liberation shows exceptional conditions. Marriages and births showed high figures; mortality, infant mortality and the death rate of respiratory tuberculosis low figures, lower than any level reached before the war. The mortality rate is considered to be a world low level record. In the following summary the figures of 1936-1939, the last period of four years before the war, are also found.

	1948	1936-1939
Marriages per thousand inhabitants	9.0	8.0
Live births per thousand inhabitants	25.3	20.3
Deaths per thousand inhabitants	7.4	8.7
Deaths under 1 year per thousand live births	28.5	36.9
Death from tuberculosis per 100,000 inhabitants	21.0	32.0

ITALY

(From Our Regular Correspondent)

FLORENCE, March 15, 1949.

Genesis and Treatment of Gastric Ulcers

At a meeting of the Academy of Sciences of Ferrara under the chairmanship of Professor Dogliotti, Professor Schiassi reported on the revised view now current concerning the genesis and treatment of gastric ulcer which, in his opinion, is justified by the increase in the incidence of this disease, by the controversial concepts which still exist with regard to pathogenesis, and by the various systems of treatment which are practiced in different countries. According to the speaker, four categories must be considered: (1) gastric ulcers resulting from epigastric trauma; these forms are very rare; (2) gastric ulcers in persons with a morbid entity localized in the nervous system, such as degeneration or tumors; these forms are merely exceptional; (3) gastric ulcers of infectious, toxic and anaphylactic origin, and (4) gastric ulcers in stigmatized persons. In the latter, neurolabile persons, the human potential of disease abides in the morphology of the patient. According to the speaker, the imponderable emotional shock descending from the cortex of the hypothalamus is transmitted by the vagus to the stomach and may upset the functions. According to Professor Schiassi, the cerebral impulse is conducted into the subdiaphragmatic region by the vagus and spreads to a nervous system which consists of a symbiosis of vagal and solar elements, so that one has no longer to deal with the vagus only or with the sympathetic nerve but with one and the other associated by a rhythmic, antagonistic and segmentary function which may become manifest in the viscus through terminal ramifications which end in the muscles and in the gastric glands.

The emotional shock communicating with this system, which the speaker has labeled "forgotten" because nobody has called attention to it, may put the antagonistic rhythm in disorder with damaging effects on the gastric tissues. This damage consists of hyperemia, ischemia, capillary hemorrhages or edema, and since it occurs in a viscus which secretes a liquid dissolvent, it constitutes a condition favorable to the development of the liquid which by its corroding activity produces ulceration. This etiologic interpretation authorizes the surgeon to intervene by interrupting the concatenation between the elements of the vago-solar system which cause the degradation of the tissues and the formation of ulcers.

Congress of Industrial Medicine

Under the chairmanship of Prof. Angelo Viziano the Fourteenth National Congress of Industrial Medicine was held in Turin and was attended by many physicians, politicians and representatives of public health, public instruction and other governmental departments. Prof. Luigi Carozzi, University of Geneva, secretary general of the permanent international commission on occupational diseases, presented the opening report on "Progress and Present Tendencies in Industrial Medicine."

The development of this discipline, from the point of view of prevention, is characterized today by a physiopsychologic and social as well as prophylactic and technical aspect, inasmuch as 90 per cent of the incapacity which causes absence from work is not of occupational origin. Among the important problems is the examination of applicants' eyesight, particularly if they are to do precision work; another important problem, is that of the colors used on the walls of work rooms and for parts of the machinery, which are factors in the well-being of the workmen in their occupational environment and at the same time factors in greater production and in the prevention of accidents.

In the clinical field it is again the human factor which is dominant in the genesis of occupational diseases and of accidents during work. The preclinical latent period is of great importance in cases of occupational intoxication. Concerning the treatment with 2,3-dimercaptopropanol (BAL) recommended for many other intoxications in addition to arsenic poisoning, the author advises caution when the toxin which should be combated has a pronounced effect on the liver. Spas are in great favor for the treatment of occupational diseases. Professor Carozzi emphasized that it is the task of the physician to defend the workman against the dangers of excessive mechanization with the aim of rehumanizing work conditions.

Prof. Luigi Ferranini of Bari presented a report on "Fatigue of Respiratory Apparatus." He summarized the effects of muscular or intellectual work, of changes of temperature and of variations in atmospheric pressure on the respiratory function; the speaker analyzed the fatigue of the respiratory mechanism under conditions of strain as during singing, screaming and excitement; he presented a pathogenic interpretation of pulmonary emphysema and of hemorrhage of pulmonary parenchyma due to strain.

Professor Caccuri of Naples discussed the behavior of the cardiovascular apparatus in occupational poisoning. Professor Molfino of Genoa discussed the pathologic changes and symptoms of welders using the electric arc.

Professors Ponzio, Matli and de Lorenzi were co-speakers on "The Roentgenologic Diagnosis in Factory Health Services." De Lorenzo discussed particularly the modern fluorescent screen technic and the favorable results obtained by this means of research in thousands of workmen. Professor Ponzio reported on the apparatus and on the organization of the roentgenologic service in factories. Professor de Dominicis spoke on "Elements of Reasonable Salary," and its problems in respect to disease were presented in a report by Professor Mantovani.

Studies on Senescence

At the invitation of the International Society for Studies on Senescence with headquarters in Oxford, a National Society for Studies on Senescence has been established in Italy, the fifteenth nation which has joined the Oxford society. Prof. Maurizio Ascoli has been nominated as chairman of the new Italian society, which decided to publish a second edition of a classical work on senescence, compiled by Professor Devoto, and to distribute it to all Italian physicians. Professors Bastai and Dogliotti will be invited to bring up to date their report on old age, presented in 1938 to the Congress of Physiopathology, by enlarging it from the points of view of social medicine and treatment. Professor di Guglielmo, with the cooperation of other scholars, will extend the research of the school of Professor Ferrata to the hematology of old age. The first congress of the new society will be held in Rome in October 1949.

BRAZIL

(From Our Regular Correspondent)

RIO DE JANEIRO, March 19, 1949.

Minimal Lesions of Pulmonary Tuberculosis in Adults

Examination of several thousands of industrial and clerical workers at the outpatient department of the Institute Clemente Ferreira in São Paulo disclosed 936 adults with minimal lesions of pulmonary tuberculosis. Of this total, 819 presented exudative lesions and 117 productive lesions. Among the former, 77.4 per cent were infiltrated and 22.6 per cent were scattered lesions. The right lung was involved in 62.4 per cent, while the left one was involved in only 37.6 per cent. Lesions were bilateral in 11.1 per cent. The most frequent localization was in the apex and the infraclavicular region (88.9 per cent). Clinical symptoms were not present in 53.9 per cent. In 94.2 per cent of patients with symptoms, clinical symptoms had lasted for not longer than one year. Examination of gastric contents showed 9.6 per cent bacteriologic positive results in patients with productive lesions and 30.9 per cent in those with exudative lesions.

One hundred and fifty-three patients not subjected to collapsotherapy were studied. Among those with exudative lesions, 60.1 per cent had progressive lesions, 10.5 per cent arrested, 2.6 per cent partially recovered, and 26.8 per cent completely recovered. In cases of productive lesions, 26.7 per cent were progressive. Seventy-four patients subjected to pneumothorax showed the following results: 27 per cent advanced, 5.4 per cent remained unchanged and 67.6 per cent showed favorable evolution.

Infections Caused by Proteus Morgani

Dr. Vera Leite Ribeiro of the Hospital dos Servidores do Estado, Rio de Janeiro, studied cultures recovered from feces and other material in 31 cases of dysentery in infants. Nine strains (29 per cent) possessed a specific flagellar (H) antigen, according to cross agglutination and absorption tests. Such an antigen failed to appear in other Proteus morgani cultures occurring in normal feces of healthy persons, as well as in patients suffering from well known Shigella or Salmonella infections. All cases showing presence of special H antigen P. morgani cultures the conditions were recognized as pathologic by both clinical investigation and postmortem examination (6 cases were fatal). Circulating antibodies (specific H agglutinins) were also found in a patient with a chronic condition who had a specific P. morgani strain in the feces.

Activity of Adrenal Cortical Extract by Oral Administration

Effectiveness of corticoadrenal extracts when given parenterally has been demonstrated. In a recent study, Dr. Maria I. Mello, of the Division of Chemistry and Pharmacology of the Oswaldo Cruz Institute studied the effects produced by this extract when given orally and subcutaneously. Four different methods were tried. Oral administration was by stomach tube. Corticoadrenal extracts employed in the study were prepared by the Swingle and Pfiffner technic. The extract was given as total extract and as a charcoal adsorbate. Adrenalectomized rats treated by the oral preparations responded better to the charcoal adsorbate than to the total extract. The glycogen liver deposition test of Britton and Silvette and the Grollman test were used to measure results. Responses obtained with the adsorbate were similar to those obtained from injected

extracts. All animals received the same dose of the cortical extract, and all the groups used for the tests were maintained under identical conditions.

Lepromin Reaction in Healthy Noncontact Persons

Drs. Abraão Rothberg and N. Souza Campos, of the Division of Leprosy, São Paulo State Department of Health, performed the lepromin test in 163 adults and 94 children. All were healthy residents of São Paulo. These persons spent all or almost all their lives in the city or in rural sections of the state where leprosy is endemic. They had no known direct contact with cases of the disease. Some of the adult group also were tested by the Mantoux reaction with 1:10,000 dilution of tuberculin. Both the early Fernandez reaction and the late Mitsuda reaction were frequently found positive in adults. Negative results were frequently observed in the children. Usually agreement occurred in results of the early and the late lepromin reactions both in positivity and negativity, but in many Fernandez-negative cases a late Mitsuda positive reaction was observed.

Comparison with Mantoux tests supports the opinion that the tuberculin sensitization influences the early lepromin reaction. The late lepromin reaction did not seem to be influenced by tuberculin sensitization.

Medical Examinations and Licensure

COMING EXAMINATIONS AND MEETINGS

NATIONAL BOARD OF MEDICAL EXAMINERS

NATIONAL BOARD OF MEDICAL EXAMINERS: *Parts I and II.* Various Centers. June 20-22, Sept. 12-14. *Part III.* June, various centers. Exec. Sec., Mr. E. S. Elwood, 225 S. 15th St., Philadelphia 2.

EXAMINING BOARDS IN SPECIALTIES

AMERICAN BOARD OF ANESTHESIOLOGY, INC. *Written.* Various Centers. July 15. *Oral.* Oct. 16-20. Sec., Dr. Curtiss B. Hickcox, 745 Fifth Ave., New York 27.

AMERICAN BOARD OF INTERNAL MEDICINE: *Oral.* Philadelphia, June 1-3. *Written.* Oct. 17. Asst. Sec.-Treas. Dr. W. A. Werrell, 1 Main St., Madison 3, Wis.

AMERICAN BOARD OF NEUROLOGICAL SURGERY: *Oral.* Chicago, June 1949. Sec., Dr. W. J. German, 310 Cedar Street, New Haven, Conn.

AMERICAN BOARD OF OPHTHALMOLOGY: *Oral.* New York, June 11-15; St. Louis, Dec. 15-19; Boston, December. Sec., Dr. S. J. Beach, 56 Ivie Rd., Cape Cottage, Maine.

AMERICAN BOARD OF ORTHOPAEDIC SURGERY. *Part II.* New York City, Jan. 1950.: Final date for filing application for Part II is Aug. 15. Address: Dr. Francis M. McKeever, 1136 W. 6th St., Los Angeles 14, Calif.

AMERICAN BOARD OF OTOLARYNGOLOGY: Chicago, Oct. 4-7. Sec., Dr. D. M. Lierle, University Hospital, Iowa City.

AMERICAN BOARD OF PEDIATRICS: *Written.* Under local monitors, June 24. *Oral.* Cleveland, Sept. 16-18; New York City, Oct. 21-23; Chicago, Dec. 9-11. Sec., Dr. John McK. Mitchell, 6 Cushman Road, Rosemont, Pa.

AMERICAN BOARD OF PHYSICAL MEDICINE. Philadelphia, June 4-5. Sec., Dr. R. L. Bennett, 30 N. Michigan Blvd., Chicago.

AMERICAN BOARD OF PLASTIC SURGERY: Examinations are given in June and November of each year in the home town of applicants. Sec.-Treas., Dr. Louis T. Byars, 400 Metropolitan Bldg., St. Louis, Mo.

AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY, INC. *Special Examination.* October. Place to be announced. Final date for filing application is July 15. December, New York City. Sec. Dr. F. J. Braceland, 102-110 Second Ave., S.W., Rochester, Minn.

AMERICAN BOARD OF RADIOLOGY: Atlantic City, June 2-4. Sec., Dr. B. R. Kirklin, 102-110 Second Ave., S.W., Rochester, Minn.

AMERICAN BOARD OF SURGERY: *Written.* Various Centers, October 26. Final date for filing application is July 1. Sec., Dr. J. Stewart Rodman, 225 S. 15th St., Philadelphia.

AMERICAN BOARD OF UROLOGY: *Written,* December. *Oral and Clinical.* Chicago, Feb. 11-15. Final date for receipt of case histories is Sept. 1, 1949. Sec., Dr. Harry Culver, 7935 Sunnyside Road, Minneapolis 18, Minn.

BOARDS OF MEDICAL EXAMINERS

ALABAMA: *Examination.* Montgomery, June 28-30. Sec., Dr. D. G. Gill, 519 Dexter Ave., Montgomery.

ARKANSAS: * Little Rock, June 9-10. Sec., Dr. L. J. Kosminsky, Texarkana. *Eclectic.* Little Rock, June 9-10. Sec., Dr. C. H. Young, 1415 Main St., Little Rock.

CALIFORNIA: *Examination.* San Francisco, June 21-23. Sec., Dr. Frederick N. Scatena, 1020 N St., Sacramento.

COLORADO: * *Examination.* Denver, June 20-22. Sec., Dr. W. W. King, 831 Republic Bldg., Denver.

DELAWARE: Dover, July 12-14. Sec., Dr. J. S. McDaniel, 229 South State St., Dover.

FLORIDA: * *Examination.* Jacksonville, June 26-28. Sec., Dr. Frank D. Gray, 12 N. Rosalind Ave., Orlando.

GEORGIA: *Examination.* June 8-9, Atlanta and Augusta. *Reciprocity.* Atlanta, June. Sec., Mr. R. C. Coleman, 131 State Capitol, Atlanta.

GUAM: *Endorsement.* Agana, Last Friday of each month. Sec., Capt. C. K. Youngkin, Dept. of Public Health, Guam. % F.P.O., San Francisco, Calif.

HAWAII: * *Examination.* Honolulu, July 11-14. Sec., Dr. S. E. Doolittle, 881 S. Hotel St., Honolulu.

IDAHO: Boise, July 11-13. Sec., Miss Estella S. Mullinet, Bureau of Occupational Licenses, 355 State House, Boise.

INDIANA: *Examination.* Indianapolis, June 21-23. Sec. Board of Medical Registration and Examination. Dr. Paul R. Tindall, 416 K. of P. Bldg., Indianapolis.

IOWA: * *Examination.* Iowa City, June 13-15. Sec., Dr. M. A. Royal, 506 Fleming Bldg., Des Moines.

KANSAS: Kansas City, June 1-2. Sec., J. F. Hassig, 905 North 7th St., Kansas City, Kans.

KENTUCKY: *Examination.* Louisville, June 15-17. Sec., Dr. Bruce Underwood, 620 S. 3rd St., Louisville 2.

MAINE: Augusta, July 5-6. Sec., Dr. Adam P. Leighton, 192 State St., Portland.

MARYLAND: *Examination.* Baltimore, June 21-24. Sec., Dr. Lewis P. Gundry, 1215 Cathedral St., Baltimore. *Homeopathic.* Baltimore, June 14-15. Sec., Dr. John A. Evans, 612 West 40th St., Baltimore.

MASSACHUSETTS: *Written.* Boston, July 12-15. Sec., Dr. George L. Schadt, 413 E. State House, Boston.

MICHIGAN: * *Written.* Detroit and Ann Arbor, June 13-15. Sec., Dr. J. Earl McIntyre, 203 Hollister Bldg., Lansing.

MISSISSIPPI: Jackson, June 21-22. Asst. Sec., Dr. R. N. Whitfield, State Board of Health, Jackson.

MISSOURI: *Examination.* St. Louis, May 30-31 and June 8-10. Exec. Sec., Mr. John A. Hailey, Box 4, Jefferson City.

MINNESOTA: * Minneapolis, June 21-23. Sec., Dr. Julian F. DuBois, 230 Lowry Medical Arts Bldg., St. Paul 2.

MONTANA: Helena, Oct. 3-5. Sec., Dr. Otto G. Klein, First National Bank Bldg., Helena.

NEBRASKA: * *Examination.* Omaha, June 6-8, Dir., Bureau of Examining Boards, Mr. Oscar F. Humbie, 1009 State Capitol Building, Lincoln 9.

NEW JERSEY: *Examination.* Trenton, June 21-24. Sec., Dr. E. H. Hallinger, 28 West State Street, Trenton 8.

NEW YORK: Albany, Buffalo, New York and Syracuse, June 28-July 1. Sec., Dr. Jacob L. Lochner, 23 South Pearl St., Albany.

NORTH CAROLINA: *Examination.* Raleigh, June 23-25. Sec., Dr. Ivan Proctor, 226 Hillsboro St., Raleigh.

NORTH DAKOTA: * *Written,* Grand Forks, July 5-7. *Reciprocity,* Grand Forks, July 8. Sec., Dr. C. J. Glaspel, Grafton.

OHIO: *Examination.* Columbus, June 15-18. *Endorsement,* Columbus, July 5. Sec., Dr. H. M. Platter, 21 W. Broad St., Columbus.

OKLAHOMA: * Oklahoma City, June 8-9. Sec., Dr. Clinton Gallaher, 813 Braniff Bldg., Oklahoma City.

PENNSYLVANIA: *Examination.* Philadelphia and Pittsburgh, July. Acting Sec., Mrs. R. G. Steiner, 351 Education Bldg., Harrisburg.

PUERTO RICO: San Juan, Sept. 6-10. Sec., Dr. Luis Cueto Coll, Box 3717, Santurce.

RHODE ISLAND: * *Examination.* Providence, July 7-8. Chief, Mr. Thomas B. Casey, 366 State Office Bldg., Providence.

SOUTH CAROLINA: *Examination.* Columbia, June 27-29. *Endorsement.* Columbia, June 27-28, Aug. 1, Sept. 5 and Oct. 3. Sec., Dr. N. B. Heyward, 1329 Blanding St., Columbia.

SOUTH DAKOTA: * *Examination.* Pierre, July 19. Sec., Dr. G. J. Van Heuvelen, Capitol Bldg., Pierre.

TEXAS: *Examination.* Austin, June 16-18. Sec., Dr. M. H. Crabb, 209 Medical Arts Bldg., Fort Worth 2.

UTAH: *Endorsement.* Salt Lake City, May 23. *Examination,* Salt Lake City, July 13-15. Sec., Dept. of Registration, Miss Rena B. Loomis, 324 State Capitol Bldg., Salt Lake City.

VIRGINIA: *Examination.* Richmond, June 17-18. *Reciprocity.* Richmond, June 16. Dr. K. D. Graves, 631 First St., S.W., Roanoke.

WASHINGTON: * Seattle, July. Sec., Mr. Edward C. Dohm, Department of Licenses, Olympia.

WISCONSIN: * *Examination.* Milwaukee, June 28-30. Sec., Dr. C. A. Dawson, Tremont Bldg., River Falls.

WYOMING: Cheyenne, June 20. Sec., Dr. Franklin D. Yoder, Capitol Bldg., Cheyenne.

* Basic Science Certificate required.

BOARDS OF EXAMINERS IN THE BASIC SCIENCES

ALASKA: Feb. 1950. Sec., Dr. C. Earl Albrecht, Box 1931, Juneau.

ARIZONA: Tucson, June 21. Sec., Mr. Francis A. Roy, Science Hall, University of Arizona, Tucson.

COLORADO: *Examination.* Denver, June 1-2. Sec., Dr. Esther B. Starks, 1459 Ogden St., Denver.

CONNECTICUT: New Haven, June 11. Exec. Asst., State Board of Healing Arts, Miss Mary G. Reynolds, 110 Whitney Ave., New Haven 10.

FLORIDA: *Examination.* Gainesville, June 11. Sec., Mr. M. W. Emmel, University of Florida, Gainesville.

MINNESOTA: *Examination.* June and Oct. Sec.-Treas., Dr. Raymond N. Bieter, 105 Millard Hall, Univ. of Minnesota, Minneapolis.

OREGON: Portland, June 18, Sept. 3 and Dec. 3. Sec., Mr. Charles D. Byrne, State Board of Higher Education, Eugene.

SOUTH DAKOTA: Vermillion, June 3-4. Dr. G. M. Evans, 310 E. 13th St., Yankton.

TENNESSEE: Memphis, July 8-9. Sec., Dr. O. W. Hyman, 874 Union Ave., Memphis 3.

WISCONSIN: Milwaukee, June 4, Sept. 24 and Dec. 3. Sec., Prof. W. H. Barber, Ripon College, Ripon.

Council on Medical Education and Hospitals

COOPERATIVE PLAN FOR THE APPOINTMENT OF INTERNS

The following new agreement for internship appointments has been approved by the Association of American Medical Colleges, the Council on Medical Education and Hospitals of the American Medical Association and the American Hospital Association.

This plan for 1949 will apply only to undergraduate students in the fourth year of their medical school course.

Application for Internships.—1. Applications are to be filed with the hospitals beginning on the third Tuesday in October (Oct. 18, 1949).

2. Application should be made in duplicate; the original to be forwarded to the dean of the applicant's medical school for transmission together with credentials to the hospital or hospitals of the applicant's choice; the second copy to be mailed directly to the hospital or hospitals by the applicant.

3. The application may be accompanied by letters of recommendation from faculty members. Such letters of recommendation shall not be routinely requested by hospitals.

4. The number of applications filed shall not be limited in number.

Tendering of Internship Appointments.—1. The tendering of internship appointments by hospitals shall be made by telegram. No telegram shall be sent which will arrive prior to 12:01 a. m. of the third Tuesday in November (Nov. 15, 1949). Telegrams may be filed in advance for delivery at 12:01 a. m.

Applicants may visit hospitals and be interviewed by the intern committee, but the hospital or its representative shall not commit the hospital or the applicant before Nov. 15, 1949.

2. Hospitals may notify alternates of their status at the same time and in the same manner as their first choice candidates.

Acceptance of Appointments.—1. Acceptance of appointments should be made promptly. Applicants should be allowed a reasonable period of time to consider appointment offers, but no specified waiting period after 12:01 a. m. is obligatory.

2. On acceptance of an appointment, prompt notification of withdrawal of applications to other hospitals which have offered appointments should be made.

1950 GRADUATES OF THE UNIVERSITY OF WASHINGTON SCHOOL OF MEDICINE

The Council on Medical Education and Hospitals has ruled that students who will graduate from the University of Washington School of Medicine in 1950 will be considered for purposes of internship appointment as if they had graduated from an approved medical school. Hospitals approved for intern training will not lose their approved status if they accept these students for internships.

Since its organization, the development of the University of Washington School of Medicine has been followed closely by the Council. In accordance with long-standing policy, however, approval is not granted any medical school until representatives of the Council survey the school after instruction has been instituted in all four years of the medical course. The first senior class at the University of Washington will not be enrolled until the fall of 1949. Inspection of the school, therefore, cannot be carried out in time to include the findings of the survey in the 1949 Educational Number of THE JOURNAL, which will be used by hospitals for determining whether applicants for internships are graduates of approved medical schools.

If the University of Washington School of Medicine is included on the Council's approved list in 1950, the work of all students in good standing at the school at the time the Council's representatives survey the school will be fully accredited.

GRADUATE TRAINING PROGRAMS ACCEPTABLE BY THE AMERICAN BOARD OF PSYCHIATRY AND NEUROLOGY

The Council on Medical Education and Hospitals has limited its approval of programs for graduate training to those offered in connection with general or special hospitals. The following information is published, however, at the request of the American Board of Psychiatry and Neurology to indicate the availability of a special type of training which is acceptable to the board and carries full credit toward certification by that board.

Requirements for Acceptance

In order to facilitate the arrangements for training in child psychiatry (which constitutes a major aspect of modern psychiatry), the American Board of Psychiatry and Neurology will accept one year of training in psychiatric clinics for children which may or may not be a part of a hospital approved for residency training, provided such a clinic gives adequate supervision and instruction for full time training during the entire third year of the required three year formal training period. For the purpose of evaluating such clinics, the following conditions and criteria are deemed essential by the American Board of Psychiatry and Neurology:

1. That the clinic have a full time medical director, psychologist, and social worker qualified by training and experience in child psychiatry and allied fields to supervise the training of residents.

2. That the major portion of such training be devoted to therapy adequately supervised by this qualified staff.

3. That the service and teaching activities of the clinic be integrated with those of the community and its social agencies.

4. That clinic work be supplemented by seminars, case conferences, journal clubs or other opportunities for the discussion of the basic principles involved in outpatient work with children and parents, teacher, public health and welfare agency personnel.

5. That such a training clinic be well established in the community with a qualified staff that has operated together long enough as a team to insure stable and sound functioning.

6. That the senior members of the clinic team show evidence of previous experience in the teaching of psychiatry in general, child psychiatry in particular, and their allied fields.

These criteria set forth by the Board pertain more particularly to community-sponsored clinics offering full time training in child psychiatry during the third year of formal residency training. If these clinics are affiliated with hospitals already maintaining approved programs, separate approval is not required unless warranted on the basis of their meeting all requirements for straight fellowship training in child psychiatry.

The following clinics are acceptable to the American Board of Psychiatry and Neurology as qualifying under these provisions.

Center	Director
Children's Psychiatric Division, Langley-Porter Clinic, San Francisco	Dr. Stanislaus Szurek
Institute for Juvenile Research, 907 S. Wolcott Ave., Chicago	Dr. Sophie S. Sloman
Louisville Mental Hygiene Clinic and Child Study School, 610 S. Floyd St., Louisville, Ky.	Dr. Spafford Ackerly
The Guidance Center, 1737 Prytania St., New Orleans	Dr. Milton E. Kirkpatrick
The Psychiatric Clinic of the Mental Hygiene Society of Maryland, Baltimore	Dr. H. Whitman Newell
Children's Center, 244 Townsend St., Roxbury, Mass.	Dr. Marian Putnam and Mrs. Beata Rank, co-directors
Judge Baker Guidance Center, 38 Beacon St., Boston	Dr. George E. Gardner
Amherst H. Wilder Clinic, 279 Rice St., St. Paul	Dr. Hyman S. Lippman
Central Clinic, Cincinnati General Hospital, Cincinnati	Dr. Maurice Levine
Child Guidance Clinic, 1711 Fitzwater St., Philadelphia 46	Dr. Frederick H. Allen
Pittsburgh Child Guidance Clinic, 3004 Victoria St., Pittsburgh 13	Dr. Harry M. Little
Children's Service Center of Wyoming Valley, 335 South Franklin St., Wilkes-Barre, Pa.	Dr. J. Franklin Robinson

RESIDENCY TRAINING IN RADIOLOGY

A survey of hospitals approved for residency training in radiology is contemplated by the American Board of Radiology, in cooperation with the Council on Medical Education and Hospitals. This survey will include those hospitals which are presently fully approved, approved on a temporary basis or have applied for approval.

According to a recent announcement of the board regarding its plans, the inspection work will require the assistance of forty to fifty radiologists who will visit the radiology department of each hospital included in the survey. The board has estimated that the project will require several months to complete.

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Medical Motion Pictures

FILM REVIEWS

Fractures. An Introduction. 16 mm., color, sound, 1,000 feet (1 reel), showing time twenty-six minutes. Prepared in 1948 by The American College of Surgeons under the medical supervision of Harrison L. McLaughlin, M.D., New York. Produced by Eddie Albert Productions, Hollywood, under a grant by and procurable on loan from the Johnson & Johnson Research Foundation, Orthopedic Division, New Brunswick, N. J.

This motion picture deals with fundamental concepts of fractures and by means of specific examples, well chosen to illustrate certain common types, forcefully drives home lessons of physiology, pathology and treatment.

It begins with the actual mechanism of fracture, such as by tripping and falling on an outstretched hand, depicting certain fractures that may occur from such injury. Effects on the body as a whole are stressed; the possible injuries distant from the fracture, the adjacent soft tissue involvement and the elements that contribute to the displacement of the fragmented bones. Recognition of the associated pathologic changes is emphasized and treatment illustrated. Consideration is given to the patient as an individual who has a specific job awaiting his return.

Several common types of fractures are shown in detail. Physiology of repair according to present concepts is demonstrated. The necessity for obtaining desirable alinement and immobilization is depicted. Examples of the unsatisfactory results which may occur without proper treatment are illustrated. Actual manipulations on a patient are seen during reduction of a fracture of the upper extremity. Brief mention is made of the desirability of various forms of traction for certain fractures and the occasional necessity for open reduction and fixation. Since it is a fundamental teaching film the more specialized methods of fracture treatment are properly kept in the background.

The application of plaster splints and the follow-up care of a patient wearing plaster are seen. Common complications of plaster immobilization are mentioned and treatment illustrated. The patient is seen exercising various parts of the body to gain strength and improve motion, and the interest of the surgeon in returning the patient to his position in as perfect condition as possible is evident.

This film is an excellent example of what can be done to improve the teaching of fracture treatment. It could well be used at the beginning course in fractures and repeated at the end of the course. In order to expand on certain points and to deviate toward more specific treatment, it would have been valuable to have a set of slides accompany the film.

From a production standpoint, the film is well done in every respect. The animation and roentgen reproductions are especially good.

The success of this film should encourage the production of other films showing in detail the various forms of traction, internal fixation, treatment of malunions and nonunions and other elements concerned in fracture treatment.

Supracondylar Leg Amputation. 16 mm., color, silent, 290 feet, showing time thirteen minutes. Prepared in 1947 by and procurable on loan or purchase from Philip Thorek, M.D., 25 East Washington Street, Chicago 2.

This is a record type film showing a supracondylar type of leg amputation in which a simple circular incision is utilized without attempt to form flaps. Each structure is individually isolated, ligated and severed.

The type of amputation is relatively common with a few modifications of the surgeon demonstrating the procedure. The strong points of the film are the excellent dissection of the soft tissues and careful exposure of each structure. The careful handling of all tissues is commended.

The weak points of the film from the technical side are the excessive showing of hemostats and suturing, the photographing of many heads and hands that obstruct the view of the actual work and the extraneous material photographed in the background.

The professional objections might be listed as: (1) the use of a film on amputation without even a tourniquet's being shown available in case of necessity; (2) the unnecessary length of exposure and time consumed in detailed work that could be done rapidly without unnecessarily endangering the operative procedure; (3) the use of nonabsorbable suture material throughout, which in many operations might be contraindicated; (4) placing of the resultant scar on the distal end of the stump, which is not always the best place for a scar for modern types of prosthesis; (5) the use of alcohol injections into the nerve trunk, which is open to question in modern amputation, and (6) the treatment of the periosteum at the distal end of the amputation stump, which is opened to some technical questioning.

This film would be best viewed by specialists who could properly evaluate the advantages and disadvantages of the material depicted. It is not recommended for general practitioners, residents, interns or medical students, who, because of limited experience in amputations, might not be able to evaluate the material properly. It contributes little to the present knowledge of amputations and because of its individual approach to the subject has the inherent danger of formulating ideas that may not stand the test of time.

Portacaval Shunt for Portal Hypertension. 16 mm., color, silent, 425 feet (1 reel), showing time fifteen minutes. Prepared in 1948 by and procurable on loan or purchase from Philip Thorek, M.D., 25 East Washington Street, Chicago 2.

The operative procedure used in end to side portacaval shunt on a patient with a diagnosis of cirrhosis of the liver associated with ascites is illustrated. There is no mention of bleeding esophageal varices, which is generally felt as the real indication for this operative procedure. In this case the liver did not appear too severely damaged and the ascites not extreme. Good medical management will greatly relieve many of these patients, particularly if sufficient protein is given to elevate the plasma albumin to a normal range; if this is accomplished, the ascites can be controlled. This treatment should have been tried on the patient, although little knowledge of the past history is given in the picture.

The operative technic is not well shown. Some of the finer technical details are skipped, such as the anastomosis between the open end of the portal vein and the side of the vena cava. Mention is not made of the end results.

From a photographic standpoint, the color quality is good; however, in several scenes the surgical field is not centered on the screen. A better camera angle would have shown some of the technics more clearly, especially those in the deeper cavities.

This film cannot be recommended as a teaching aid.

Supra-Aortic Esophagogastrostomy for Carcinoma of the Midportion of the Esophagus. 16 mm., color, silent, 975 feet (3 reels), showing time thirty-eight minutes. Prepared in 1948 by and procurable on loan or purchase from Philip Thorek, M.D., 25 East Washington Street, Chicago 2.

This film shows in detail surgical removal of a carcinoma of the midportion of the esophagus and the technic of mobilization of the stomach and its anastomosis to the remaining supra-aortic portion of the esophagus. The history, roentgenograms and esophagoscopic findings are briefly presented. The surgical procedure illustrating the actual technical phases and important steps of the operation are outlined, and landmarks are well depicted. The patient is shown on succeeding postoperative days and on the tenth postoperative day eating a liquid and soft diet without difficulty. Roentgenograms taken before and after operation are shown.

While this is a long complicated operation involving many separate steps, the film is possibly a little too long. Judicious editing would not destroy the purpose of the film.

This production should be suitable for general surgeons, otolaryngologists, residents and interns.

The field wanders on the screen; otherwise the photography is good.

Bureau of Legal Medicine and Legislation

MEDICOLEGAL ABSTRACTS

Health Departments: Right to Reimburse Executive for Expenses at Medical Meeting.—The Louisville and Jefferson County Board of Health reimbursed one of its executives for expenses incurred in attending a meeting of the Southern Branch of the American Health Association held in Memphis, Tenn. The board contended that it was necessary for certain of its executives and employees to make outstate trips in attending such meetings to obtain and collect information regarding public health practices, that this travel was undertaken by its executives and employees to qualify and equip themselves more fully and intelligently to carry out the duties demanded by the public health of the community, that the trip was for public purposes and benefits and that the information thus obtained was utilized in public health administration. The trial court held that the board was without authority to pay the expenses of its members or employees in attending medical meetings, schools, institutions or conferences to better qualify themselves to discharge their duties. From this judgment the board appealed to the Court of Appeals of Kentucky.

The defendant board was created as a city-county board of health, and the statute creating it provided, among other things: "The board may expend funds for the purpose of conducting research work, including laboratory and biometrical work, and establishing, erecting and maintaining laboratories and other buildings and all appurtenances thereto for research work as to the prevalence, causes, cure and prevention of disease, and to that end the board is authorized to expend funds in the employment of such persons or organizations, scientists or research experts as the board may deem proper. The board shall be charged with the responsibility for the collection from official and other sources and for the publication of such statistics and information as may be useful and necessary for the performance of its duties. . . ."

The board admits, said the Court of Appeals, that all of its power is derived from the legislature and that there is no specific statutory authorization for reimbursement to its executives or employees of expenses incurred in attending medical meetings and conventions in search of information on health. If such expenses are legitimate, continued the court, they arise by necessary implication in carrying out expressly conferred powers. The excerpt quoted herein authorizes the board to expend funds for the purpose of conducting research work and charges it with responsibility for the collection and publication from official and other sources of such statistics and information as may be useful in the performance of its duties. These and other broad powers conferred on the board by the statute, the court continued, come very near expressly authorizing it to pay the expenses of its officers and personnel in attending medical meetings. Certainly, by necessary implication, the statute authorizes this expenditure, since there is hardly any other practical way whereby the information can be obtained by public health officers except in attending such medical meetings. It may be argued that they could remain at home and gather this information by reading medical journals and the proceedings of meetings held by doctors. But it is common knowledge that hearing some eminent specialist lecture, engaging him in conversation thereafter and seeing him demonstrate and put into practice his theory, is much more enlightening than reading of it in a journal. It appears that at the meeting in question there was a discussion on the common problems of health administration by the board's representative with other members who attended a symposium on hospital and sanitary construction; also, he attended another symposium on tuberculosis, its control in urban and rural communities; another on public health administration, and another on recruiting and training of public health personnel.

The record showed that of an appropriation of $1,877,000 for the fiscal year there had been expended in outstate travel up to the time of the filing of the suit in May only the sum of $1,603. Therefore, said the court, it can hardly be said that the board was allowing an unusual amount of its budget to be spent in outstate travel in collecting information and statistics relative to their duties as public health officers. It appeared that a resolution was adopted by the board providing that travel allowance could be approved only if directed by the Director of Health. The expense was limited to $10 per day and actual railroad fare, and 25 per cent of the entire expense had to borne by the person making the trip. This resolution, said the court, is persuasive that the board intended to see that no abuse occurs in outstate travel. However, should abuse arise, then an aggrieved party has access to the courts. So in the case at bar, the court concluded, when the legislature authorized the board to "expend funds for . . . research" and charged it with the responsibility "for the collection from official and other sources and for the publication of such statistics and information as may be useful and necessary for the performance of its duties," the necessary implication is that the board may bear the expense of its officers and employees in attending medical meetings outside of the state where such research information and statistics may be found. Accordingly the judgment denying the expenditure was reversed. *Louisville and Jefferson County Board of Health v. Steinfeld, 215 S. W. (2d) 1011 (Ky., 1948).*

Malpractice: Surgeon's Liability for Nurse's Actions.—This was an action for damages resulting from the alleged negligence of the defendant physician. From a verdict and judgment for the defendant, the plaintiff appealed to the court of appeals of Ohio, Hamilton County.

The defendant physician operated on the plaintiff to remove an abscess from the lung. To do this, it was necessary to pack the pleural cavity with paraffin to prevent the infection from spreading when the abscess was opened. A later operation was performed to drain the abscess and remove the paraffin, and it was in connection with this second operation that it was asserted that the defendant was negligent. In performing this operation either of two types of electrical machines could be used, each requiring a different technic. The defendant physician instructed the hospital attendants to prepare an operating room and supply a Davis Bovie machine. When he arrived at the assigned room, he found a Davis Bovie machine was there, proceeded to test it, found that it was in good working condition and then repaired to the scrub room to prepare for the operation. After rendering himself antiseptic, he immediately went back to the operating room, where he found the plaintiff draped for the operation and the electrical machine in position, but as usual hidden from view of the surgeon by a screen between it and the operating table, excepting the attachments used by him in performing the operation. As a matter of fact, while the defendant was in the scrub room, attendants of the hospital had removed the Davis Bovie machine and substituted therefor a Fisher machine. The defendant was not informed of this substitution and proceeded with the operation as though with a Davis Bovie machine. The result was that the plaintiff received a severe third degree burn on the outer surface of the right thigh, where his leg rested on the electrode of the machine.

The plaintiff argued that even if the defendant could not be charged with personal knowledge that a Fisher machine had been substituted for the Davis Bovie machine, the scrub nurse knew of the substitution and her knowledge was attributable to the defendant as a matter of law. She was an employee of the hospital, said the court, charged with the duty of preparing the room and the instruments and of supplying the instruments to the surgeon during the progress of the operation. The defendant had no right to direct as to the mode or manner of preparing the room for the operation.

We are of the opinion, concluded the court of appeals, that the scrub nurse was not in any sense an employee of the defendant in the task of preparing the room preceding the actual beginning of the operation and that whatever negligence occurred in that connection cannot be attributed to the surgeon. Accordingly, the judgment of the trial court in favor of the physician was affirmed. *Clary v. Christiansen, 83 N. E. (2d) 644 (Ohio, 1948).*

Current Medical Literature

AMERICAN

The Association library lends periodicals to members of the Association and to individual subscribers in continental United States and Canada for a period of three days. Three journals may be borrowed at a time. Periodicals are available from 1938 to date. Requests for issues of earlier date cannot be filled. Requests should be accompanied by stamps to cover postage (6 cents if one and 18 cents if three periodicals are requested). Periodicals published by the American Medical Association are not available for lending but can be supplied on purchase order. Reprints as a rule are the property of authors and can be obtained for permanent possession only from them.

Titles marked with an asterisk (*) are abstracted below.

American Journal of Medical Sciences, Philadelphia

216:605-732 (Dec.) 1948

Millikan Oximeter in Recognition and Treatment of Anoxemia in Clinical Medicine. L. Godfrey, H. S. Pond and F. C. Wood.—p. 605.
Studies on Blood Histamine Partition of Blood Histamine Before and After Clotting in Health and Disease States. W. N. Valentine and J. S. Lawrence.—p. 619.
Interrelationship of Hodgkin's Disease and Other Lymphatic Tumors. R. P. Custer and W. G. Bernhard.—p. 625.
Hematologic and Histologic Study of Bone Marrow and Peripheral Blood of Adult Dog. P. E. Kehrs and Molly Coulter.—p. 643.
Negative Effect of Folic Acid on Irradiation Leukopenia in Cat. W. S. Adams and J. S. Lawrence.—p. 656.
Severity and Duration of Hypertension in Relation to Amount of Cardiac Hypertrophy. B. R. Stein and Arlie R. Barnes.—p. 661.
Study of Comparative Value of Tetraethylammonium Bromide and Diagnostic Spinal Anesthesia in Selection of Hypertensive Persons for Sympathectomy. L. A. Soloff, W. E. Burnett and C. T. Bello.—p. 665.
Electrocardiographic and Clinical Studies on Action of Ergotamine Tartrate and Dihydro-Ergotamine 45. D. Scherf and M. Schlachman.—p. 673.
*Use of Quinidine Sulfate in Treatment of Hiccup: Preliminary Report. S. Bellet and C. S. Nadler.—p. 680.
Sulfate and Phosphate Excretion in Urine of Patients on Rice Diet. W. Kempner, J. M. Lesesne, Barbara Newborg and C. F. Whicker.—p. 687.
*Brucellosis and Multiple Sclerosis: Cutaneous Reactions to Brucella Antigens. E. R. Kyger Jr. and R. L. Haden.—p. 689.
Endometriosis. G. H. Amsterdam.—p. 694
Liver Diseases of Infancy and Childhood: Brief Summary of Reports and Papers, 1934-1948. I. J. Wolman and J. D. Farquhar.—p. 704.

Quinidine Sulfate for Hiccup.—Bellet and Nadler report on the use of quinidine in 9 cases of hiccup. Quinidine stopped the paroxysms in 6 cases, was partially successful in 2 and failed in 1 case. The usual methods of treatment had been tried in most of these patients without success. The authors are not certain as to the dose of the drug and frequency of administration which may be necessary to stop a paroxysm. It is suggested that an initial dose of 10 grains (0.6 Gm.) preferably given by the intramuscular route, be repeated hourly for three to four doses. If the paroxysm stops, the patient may be put on a maintenance dose of 5 grains (0.3 Gm.) orally every two to three hours. If the paroxysm recurs, the initial high doses should be repeated. The authors feel that quinidine could stop a paroxysm of hiccup in two ways: (1) by a direct effect of the drug on the diaphragm as well as on the muscles of respiration, and (2) by blocking the nerve impulses at the myoneural junction. There is some suggestive evidence that this drug may have a direct effect on nerve tissue which may block impulses through the vagus and other nerves.

Brucellosis and Multiple Sclerosis.—According to Kyger and Haden acute brucellosis may produce meningitis, encephalitis and encephalomyelitis. They have reviewed 560 cases of chronic brucellosis to determine the frequency of neurologic symptoms. Their observations suggest that multiple sclerosis might be a central nervous system manifestation of chronic brucellosis. In order to investigate this hypothesis, 118 consecutive patients with multiple sclerosis were subjected to skin tests with Brucella antigens. The skin tests indicate a high degree of cutaneous reactivity to Brucella antigens. The authors also point out that areas of greatest frequency of multiple sclerosis in the United States are in the Pacific Northwest and in the Great Lakes basin; brucellosis of the abortus type is prevalent in these same areas. The question arises as to whether the concept of brucellosis as an etiologic agent in multiple sclerosis is compatible with the pathogenesis of the latter disorder. Andren contends that neither the possibility of local allergy nor the theory of virus etiology necessarily precludes the possibility of vasoconstriction or vascular occlusion as the basic mechanism in multiple sclerosis. The same statement could be applied to brucellosis; perivascular infiltration and small vessel thromboses have been noted as basic components of the granulomatous lesions produced by it. The plaque-like lesions seen in cases of Brucella chorioretinitis are certainly comparable to the plaques of multiple sclerosis, and both chorioretinitis and iritis have been seen in a few of the patients of this study.

American J. Obstetrics and Gynecology, St. Louis

56:1021-1228 (Dec.) 1948. **Partial Index**

Role of Surgery in Treatment of Carcinoma of Cervix. C. D. Read.—p. 1021.
Newer Concepts of Menstruation. I. H. Kaiser.—p. 1037.
Leiomyosarcoma of Uterus: Report of 16 Cases, 1917 to 1948. G. H. Davis, J. S. Howe and W. G. French.—p. 1048.
*Endometriosis as Cause of Ileal Obstruction. P. E. McGuff, J. M. Waugh, M. B. Dockerty and L. M. Randall.—p. 1059.
Acute Hydramnios. P. F. Mueller.—p. 1069.
Cervical Obturation with Inflatable Cannula in Uterotubal Insufflation and Hysterosalpingography. I. C. Rubin and E. Myller.—p. 1077.
*Diagnosis of Genital Malignancy by Vaginal Smears. J. R. Kernodle, W. K. Cuyler and W. L. Thomas.—p. 1083.
Critical Survey of Questionable Pelvis. H. H. Groskloss, O. F. Robbins and J. T. Moehn.—p. 1090.
Comparative Study of Efficacy of Certain Drugs in Promoting Evacuation of Female Bladder Following Gynecologic Operations. C. Lintgen.—p. 1112.
Simultaneous Intrauterine and Extrauterine Pregnancy. R. W. Devoe and J. H. Pratt.—p. 1119.
Habitual Abortion: Pathologic Analysis of 100 Cases. R. L. Wall Jr. and A. T. Hertig.—p. 1127.
Necropsy Findings in Patients with Carcinoma of Cervix: Implications for Treatment. A. Brunschwig and Virginia Pierce.—p. 1134.
Cystoscopy and Pyelography Following Paravesical Extraperitoneal Cesarean Section. Edith K. Mangone.—p. 1138.
Bacteriology of Fallopian Tubes Removed at Operation. Marie L. Koch.—p. 1142.
Statistical Report of 1,771 Cases of Hysterectomy. W. C. Weir.—p. 1151.
Rate of Renewal in Woman of Water and Sodium of Amniotic Fluid as Determined by Tracer Technics. G. J. Vosburgh, L. B. Flexner, B. B. Cowie and others.—p. 1156.
*Rh Sensitization in Primipara Caused by Intramuscular Injection of Human Serum Resulting in Fatal Erythroblastosis. J. T. Wallace, A. Wiener and Margaret H. Doyle.—p. 1163.

Endometriosis Causing Ileal Obstruction.—McGuff and his associates of the Mayo Clinic analyzed the clinical data on 16 cases in which ileal obstruction was caused by endometriosis. Three of these cases are from their clinic and 13 are cited from the literature. They stress the following as important factors in the diagnosis of endometriosis causing ileal obstruction: (1) sterility of more than ten years' duration, (2) increasing acquired dysmenorrhea, (3) menstrual periodicity in the symptoms of endometriosis and moderately progressive ileal obstruction and (4) the presence, in half of the cases, of tender nodules in the cul-de-sac of Douglas or along the uterosacral ligaments, or of uterine fibroids or ovarian cysts. Obstruction of the distal part of the ileum by endometrisois often has been thought clinically to be appendicitis accompanied by ileus. The symptoms of endometriosis can be elicited if a thorough history is taken. The treatment of choice in ileal obstruction caused by endometriosis is ileal resection, with or without preliminary ileocolostomy or enterostomy and with or without bilateral oophorectomy and/or hysterectomy, as indicated by the presence and degree of the associated pelvic pathologic processes. Ileal obstruction was found to be due, usually, to kinking caused by the adhesions of endometriosis and, to a lesser degree, to the impingement of the endometrioma into the intestinal lumen. Endometriomas of the ileum were more superficial in location than those of the pelvic part of the colon. Endometrial glands and stroma were found in all layers of the intestinal wall except the mucosa, more prominent in the muscularis propria and the serosa. Histologic examination of frozen sections of tissue and pathologic confirmation of endometriosis as the cause of ileal obstruction are imperative, because a malignant process can be excluded only by this procedure.

Diagnosis of Genital Cancer by Vaginal Smears.—Kernodle and his associates say that smears are being taken from all new patients who come to the obstetric and gynecologic clinic of Duke University. Vaginal and cervical smears, and

frequently endocervical or endometrial smears are made. So far 6,753 smears have been studied from 1,709 patients. Malignancy was diagnosed by means of the smear technic of Papanicolaou and Traut in 114 of the 124 in whom cancer was verified by pathologic studies; that is, the percentage of error was 8.1. False positive diagnoses were made in 34 of 1,585 patients; a percentage error of 2.1. Case histories of 9 patients are given to illustrate the diagnosis of genital carcinoma by the vaginal smear method. These include squamous cell carcinoma of the cervix, 5; squamous cell carcinoma of the vulva, 1; sarcoma of the uterus, 1, and chorionepithelioma, 1. Those patients having squamous cell carcinoma of the cervix show that the diagnosis of cancer sometimes may be made earlier by smears than by the biopsy method. Primary adenocarcinoma of the oviduct was revealed in the vaginal smears of one patient. One patient with adenocarcinoma of the endometrium in which smears were negative even when they were obtained from the tumor surface is reported to show weakness of the smear method.

Rh Sensitization Caused by Intramuscular Injection of Human Serum.—Wallace and his associates say that it is now generally recognized that transfusions or even intramuscular injections of Rh-positive blood are far more potent in sensitizing Rh-negative persons than is pregnancy with Rh-positive fetuses. Thus, while only 1 of about 25 Rh-negative women bearing Rh-positive babies becomes sensitized to the Rh factor, fully one half of such persons can be sensitized by injections of Rh-positive blood. This difference is readily explained by the difference in quantity of antigen injected. The authors cite a primigravida who is presumed to have been sensitized to the Rh factor by an injection of pooled human serum, given as a prophylactic measure against poliomyelitis during childhood, and in whose baby fatal erythroblastosis developed. They emphasize that the injection of serum or plasma into the Rh-negative women may create Rh sensitization. The hazard of such injections is at times as great as that accompanying the injection of Rh-positive whole blood, and may deprive even primiparas of the opportunity of having normal babies. They urge that in taking obstetric histories careful inquiry be made into whether such injections have been received by the patient. It is likewise recommended that all physicians exercise utmost care and discretion in the use of these substances. Since the preparation of this report, attention has been called by a California physician to a second case of erythroblastosis in a firstborn baby whose mother may have been sensitized by injection of pooled serum as a prophylactic measure against poliomyelitis.

American Journal of Public Health, New York

38:1635-1740 (Dec.) 1948. **Partial Index**

Health Centers and Hospital Survey and Construction Act. V. M. Hoge. —p. 1653.
It Works in Seattle: Merged Official and Voluntary Public Health Nursing Agencies. E. E. Palmquist and Marguerite Prindiville. —p. 1663.
South Richmond Community Nursing Service. C. H. Eller and Catherine L. Austin.—p. 1669.
Chronic Typhoid Carrier: I. Natural Course of Carrier State. A. Littman, J. A. Vaichulis, R. Kaplan and W. H. Baer.—p. 1675.
*Penicillin or Silver Nitrate as Prophylactic Against Ophthalmia Neonatorum? C. Berens and F. M. Foote.—p. 1680.
Age Distribution of Poliomyelitis in New York City in Relation to Previous Epidemics. A. Yankauer Jr. and H. P. Goldberg.—p. 1683.
*Paper and Paper Board in the Food Industry—Public Health Aspects. F. W. Tanner.—p. 1688.

Penicillin or Silver Nitrate Against Ophthalmia Neonatorum.—Berens and Foote point out that practically all states have laws requiring the use of a prophylactic agent in the eyes of the newborn. In most instances the law either leaves to the discretion of the state health department the type of prophylactic agent to be used or specifies "1 per cent silver nitrate or equally effective agent." Recently silver nitrate has been attacked in the press as being ineffective and harmful. The authors show that there is no evidence that permanent damage results from the use of 1 or 2 per cent silver nitrate. Solutions left standing may reach a concentration as high as 50 per cent. For this reason, it has been suggested that silver acetate be substituted, since it appears equally effective but becomes saturated at 1.2 per cent. However, furnishing 1 per cent silver nitrate in paraffin-lined beeswax ampules, as supplied by most health departments, has overcome danger to the eye from high concentration of the drug. A study by the National Society for the Prevention of Blindness in 1948 showed that there was no damage from silver nitrate among 112,035 live births and that many of the 67 cases of ophthalmia neonatorum occurring among this number were due to infections other than the gonococcus. If it should be established that penicillin or other antibiotic is as good as silver nitrate, it will be some time before the mode of administration, the strength of solution and many other important factors are determined. The authors conclude that no change concerning the use of prophylactic agents in the prevention of ophthalmia neonatorum should be recommended at the present time.

Paper in the Food Industry.—Tanner reviews the sanitary aspects of the use of paper containers for foods and stresses that coliform bacteria are absent in the pulp stream in paper mills and in finished paper. Bacteria are destroyed in paper mills by pulping under pressure with chemicals, bleaching with strong chlorine and passage over drier rolls heated to high temperature. Many species of bacteria die out in paper because of lack of moisture. Only aerobic spore-bearing bacteria survive. A bacterial count such as has been proposed for finished paper is of no value for determining the sanitary quality of paper.

Annals of Internal Medicine, Lancaster, Pa.

29:991-1220 (Dec.) 1948

Intracellular Environment for Infectious Agents. E. W. Goodpasture. —p. 991.
Newer Analgesic Drugs; Their Use and Abuse. H. Isbell.—p. 1003.
Strongyloidiasis. L. H. Kyle, D. G. McKay and H. J. Sparling Jr. —p. 1014.
Electrocardiographic Response to Changes of Posture During Respiratory Arrest Following Deep Inspiration or Expiration: Clinical Significance. A. Leimdorfer.—p. 1043.
Hypertension as Reaction Pattern to Stress; Summary of Experimental Data on Variations in Blood Pressure and Renal Blood Flow. S. Wolf, J. B. Pfeiffer, H. S. Ripley and others.—p. 1056.
Aureomycin—New Antibiotic: Evaluation of its Effects in Typhoid Fever, Severe Salmonella Infections and in Case of Colon Bacillus Bacteremia. H. S. Collins, T. F. Paine Jr., E. B. Wells and M. Finland. —p. 1077.
Infectious Arteritis. W. S. Middleton.—p. 1093.
*Coramine (Nikethamide) in Barbiturate Poisoning: Comparison with Picrotoxin; Preliminary Report. J. C. Watts and J. Ruthberg.—p. 1104.
Skeletal Lesions in Hodgkin's Disease. E. H. Falconer and M. E. Leonard.—p. 1115.
Intravenous Neostigmine in Diagnosis of Myasthenia Gravis. J. E. Tether.—p. 1132.

Niketham ide in Barbiturate Poisoning.—Watts and Ruthberg point out that poisoning due to the barbiturates has been increasing, and newspaper publicity, instead of helping the situation, appears actually to have increased the number of cases of attempted suicide from these drugs. An effective antidote to this type of poisoning is therefore of great importance. The authors describe the method used in barbiturate poisoning in the Queens General Hospital, New York City. Certain preliminary procedures were used in all groups, the only variation in the treatment being the choice of nikethamide or picrotoxin. Nikethamide, 5 cc., or lately 10 cc. of 25 per cent nikethamide, is given intravenously, followed by 5 cc. every five minutes for the first hour. In addition, a constant amount was given by intravenous drip so that a base line amount of 5 cc. per hour was administered. After the first hour, booster doses of 5 cc. intravenously were given, on the hour. In cases of more severe poisoning 5 cc. was given every half-hour as a booster. Therapy at first was continued until the patient had a return of reflexes and moved spontaneously, but now it is continued to the point of responding to stimuli such as answering questions. When picrotoxin was used a test dose of 3 mg. was given intravenously. If there was no reaction, 3 mg. was repeated every five minutes for three doses. After a fifteen minute interval another series of three injections at five minute intervals was carried out. Therapy was continued thus until the return of reflexes and spontaneous motion. Between 1941 and 1946, inclusive, 99 cases of barbiturate poisoning were treated. Particular attention is given to the 58 cases treated in 1945 and 1946. Six case histories are presented. The authors found that in no case in which nikethamide failed did picrotoxin succeed in saving the patient. In several cases in which picro-

toxin did not help, nikethamide gave good results. In several cases picrotoxin caused severe convulsions, some requiring the administration of amobarbital (amytal sodium®) for control. In no case did nikethamide cause convulsions. Nikethamide is safer to use for this reason and can be given by nurses without danger, whereas picrotoxin must be given with a physician on hand at all times because of the danger of convulsions.

Annals of Surgery, Philadelphia

128:1041-1206 (Dec.) 1948

Nature of Shift of Plasma Protein to Extravascular Space Following Thermal Trauma. O. Cope, J. B. Graham, F. D. Moore and Margaret R. Ball.—p. 1041.
*Traumatic Chylothorax: Review of Literature and Report of Case Treated by Ligation of Thoracic Duct and Cisterna Chyli. R. R. Baldridge and R. V. Lewis.—p. 1056.
Rectal Stricture of Lymphogranuloma Venereum. L. Breidenbach and L. R. Slattery.—p. 1079.
Tetraethyl Ammonium Chloride—Its Effects on Surface Temperatures of Extremities in Peripheral Vascular Conditions. F. Pearl.—p. 1092.
Tetraethyl Ammonium Chloride—Its Effects on Surface Temperatures of Arteriosclerotic Extremities. F. L. Pearl.—p. 1100.
*Chronic Progressive Infectious Gangrene of Skin: Patient with Exposure to Cold Wave Solution. F. A. Simeone and H. L. Hardy.—p. 1112.
Study of Beta 17 Ketosteroids in Case of Pseudo-Hermaphroditism Due to Adrenal Cortical Tumor. L. J. Leahy and W. L. Butsch.—p. 1124.
Evaluation of Open Jump Flap for Lower Extremity Soft Tissue Repair. S. Edwards.—p. 1131.
Carcinoma Developing in Sebaceous Cysts. J. C. Peden Jr.—p. 1136.
Comparison of Efficacy of Therapeutic Agents in Treatment of Experimentally Induced Diffuse Peritonitis of Intestinal Origin. S. Rothenberg, H. Silvani, S. Chester, Helen Warmer and H. J. McCorkle.—p. 1148.
Giant Cell Tumor of Sacrum: Case Report. R. F. Bowers.—p. 1164.
Choledochus Cyst Associated with Congenital Atresia of Bile Ducts (Report of Case). C. B. Ripstein and G. G. Miller.—p. 1173.
Traumatic Rupture of Choledochus, Associated with Acute Hemorrhagic Pancreatitis and Bile Peritonitis. N. F. Hicken and V. L. Stevenson.—p. 1178.
Multiple Carcinomas of Stomach. J. P. O'Brien and A. Oppenheim.—p. 1184.
Internal Hernia Behind Jejunal Loop of Posterior Gastro-Enterostomy. F. F. McAllister.—p. 1194.

Traumatic Chylothorax.—Baldridge and Lewis point out that the function of the thoracic duct is the conveyance of chyle and lymph into the general circulation. Chyle flows at the rate of 60 to 190 cc. per hour. With complete severance of the duct it is possible to lose over 4 liters within a twenty-four hour period. Crushing injuries, stab and bullet wounds, fall from height, blow on chest, automobile accidents, severe coughing and surgical accidents are some of the causes of chylothorax. Intrathoracic surgical injury of the thoracic duct resulting in chylothorax is not as rare as might be supposed. The authors know of 1 recent case of traumatic chylothorax following sympathectomy and another as a result of erosion of the thoracic duct from a catheter placed in the chest for drainage of an empyema. Several cases have been observed following resections of the esophagus for tumors of that organ. Adequate removal of certain tumors of the esophagus may require deliberate section of the duct. The importance of appropriate treatment of surgical injuries of the duct cannot be overemphasized. Because of the pinkish gray purulent appearance of the fluid, the unwary observer may be led into the mistaken diagnosis of empyema or hemothorax. The secondary symptoms and frequent fatal termination of chylothorax result from persistent loss of fluid, fat, protein and lymphocytes in cases in which healing does not take place spontaneously or in which successful surgical treatment is not accomplished. Mortality rates from chylothorax approximate 50 per cent. The authors list the aims of treatment of chylothorax and mention the different procedures recommended in the past. Mortality statistics of the past indicate that these measures have not been entirely successful. Repeated thoracentesis and the maintenance of nutrition are essential, but the latter is difficult to achieve. Cure of the condition depends on the establishment of collateral lymph circulation and/or the closure of the injured duct. The authors describe a case of injury of the cisterna chyli during sympathectomy for hypertension, with cure of the resulting chylothorax by ligation of the thoracic duct, the cisterna chyli and all its main afferent trunks. They feel that, in view of the high mortality rates existing in chylothorax, the inadequacy of conservative treatment and the many arguments in favor of surgical ligation, it is difficult to understand the almost universal condemnation of this procedure. They conclude that ligation of the thoracic duct and/or the cisterna chyli is feasible and may be a life-saving procedure.

Gangrene of Skin.—The patient whose case is reported by Simeone and Hardy had an unusual type of chronic progressive gangrene of the skin of the abdominal wall. Her defense reaction was peculiar in that leukopenia, rather than leukocytosis, accompanied the infection. Recently, Cotter reported 5 patients who showed skin and systemic manifestations which he attributed to the toxic effects of thioglycolic acid in "cold wave" hairdressing solutions. The patient here described was a hairdresser. Her case raises the question of the role that exposure to thioglycolic acid or thioglycolates in "cold wave" solutions may have played in her peculiar susceptibility to infection. While the principal cause of this patient's illness was the infection of the abdominal wall, the nature of the lesion was obscure. It was a granulomatous infection of the skin and subcutaneous tissue causing ulceration of the skin with blister formation and dissolution of epithelium over abdominal scars and in patchy areas over the infected skin. It was suspected that the peculiar hematologic response that this patient exhibited to infection and, in addition, the presence of impaired liver function could be due to an intoxication. Her history was searched for possible exposure to noxious agents. The only possibility was that she might have been exposed to some injurious agents in connection with her work as a hairdresser. The patient submitted for examination samples of all the materials and solutions that she has used in her beauty parlor. None of the solutions tested contained benzene or other known toxic agents except that the cold wave solutions were known to contain thioglycolic acid and/or thioglycolates. The active ingredient in cold wave solutions has already been suspected of exerting toxic effects in man. Hardy has found leukopenia in workers engaged in making cold wave solutions. McCord and his associates with subcutaneous injections of thioglycolic acid produced skin ulcerations which were slow to heal, and they also observed some renal changes and severe damage to the liver. The authors admit that it cannot be stated categorically that the woman whose case is reported owed her peculiar hemolytic response and her liver impairment to thioglycolic acid or thioglycolate intoxication. The evidence is circumstantial. It was thought important to report this case, because with accumulation of data it may be possible to indict or to exonerate cold wave solutions from responsibility.

Annals of Western Medicine & Surgery, Los Angeles

2:543-592 (Dec.) 1948

Infectious Mononucleosis: Analysis of 43 Cases. S. I. Rapaport.—p. 543.
*Relief of Pain in Acute Pancreatitis. S. Pearson and J. C. Lungren.—p. 550.
Refrigeration in Surgery. N. P. Plechas.—p. 552.
*Hemorrhages Following Tonsillectomy and Adenoidectomy: Related to Weather During Twelve Year Period. A. G. James.—p. 558.
Electronarcosis. Esther Bogen Tietz.—p. 562.
Early Electrocardiographic Changes in Acute Coronary Thrombosis: Report of Case. E. Bogen.—p. 565.

Relief of Pain in Pancreatitis.—According to Pearson and Lungren the pain in acute pancreatitis is severe and intractable. The most singular characteristic of this disease, pain, is usually sudden in onset, knifelike in character, epigastric in distribution and, in many instances, refractory to narcotics. Prostration and shock are frequent additional factors. Etamon® (tetraethylammonium chloride) has been shown to block effectively sympathetic and parasympathetic impulses at the ganglionic synapse. Inasmuch as both the sympathetic and vagal stimuli excite pancreatic secretion, it would seem reasonable to assume that this drug may be of some benefit in the nonsurgical treatment of acute pancreatitis. The authors cite the case of a woman, aged 32, who presented symptoms of pancreatitis. Intravenous and intramuscular injections of tetraethylammonium chloride counteracted the symptoms and the patient could be discharged several days later. At a follow-up examination several weeks later she was still well.

Weather Conditions and Hemorrhages After Tonsillectomy.—James investigated the relationship between weather change and hemorrhage following tonsillectomy. Among 12,826 tonsillectomies and adenoidectomies performed in a twelve year

period, on children ranging in age from 2 to 12 years, 136 postoperative hemorrhages occurred. These hemorrhages occurred in association with environmental temperature peaks. The change in temperature, not the degree of temperature, is the significant factor. The percentage of postoperative hemorrhages is greater in the colder months when temperature changes are more acute.

Archives of Ophthalmology, Chicago

39:563-706 (May) 1948

Choice of Sulfonamide Drugs for Local Use. I. H. Leopold and W. H. Steele.—p. 563.
Miotic and Antiglaucomatous Activity of Tetraethyl Pyrophosphate in Human Eyes. W. M. Grant.—p. 579.
*Effect of Insulin Hypoglycemia on Ciliary Muscle. L. H. Quinn.—p. 587.
Fractures of Orbital Floor. A. G. DeVoe.—p. 595.
Development of Changes in Visual Fields Associated with Glaucoma. A. Posner and A. Schlossman.—p. 623.
Entropion in Infancy Caused by Folding of Tarsus: Report of Case. A. Kettesy.—p. 640.
Boxing Injuries of Eyes. P. H. Boshoff and E. Jokl.—p. 643.
Use of Vasodilators in Syphilitic Atrophy of Optic Nerves. W. F. Duggan.—p. 645.
Implant of "Vitallium" Tube in Treatment of Stenosis of Lacrimal Duct. V. La Rocca.—p. 657.
Intraocular Pressure in Cases of Hemorrhage of Retina. J. M. V. Ortiz.—p. 661.
Postmortem Ocular Pressure. J. Majoros.—p. 665.
Congenital Hypoplasia (Partial Aplasia) of Optic Nerve. B. Jerome and H. W. Forster Jr.—p. 669.

Insulin Hypoglycemia and the Ciliary Muscle.—Quinn made retinoscopic examinations on patients receiving insulin hypoglycemia treatment for schizophrenia and other psychoses. Paredrine hydrobromide ophthalmic* (1-[para-hydroxyphenyl]-2-aminopropane hydrobromide) homatropine hydrobromide and atropine sulfate were used to dilate the pupils. Examinations were made before and during the hypoglycemia reaction. Definite stimulation of the ciliary muscle was found in some eyes when paredrine* was used as a mydriatic. This was most pronounced in the youngest group of patients and was greatest during deep insulin hypoglycemia. Homatropine partially abolished the stimulation of the ciliary muscle during insulin hypoglycemia, and atropine almost completely abolished it, especially during deep insulin hypoglycemia. One patient had so strong a stimulation of the sphincter of the iris during the treatment that his pupils could not be dilated with paredrine,* but they could be dilated at other times with paredrine* and could be dilated with homatropine during treatment.

Archives of Surgery, Chicago

57:185-290 (Aug.) 1948

Parenteral Feeding of Protein. R. Elman.—p. 185.
Regional Enteritis: Further Pathologic Observations. F. M. Owen Jr. —p. 195.
*Actinomycosis of Thorax and Abdomen. D. A. Campbell and B. Bradford Jr.—p. 202.
Prevention and Treatment of Wound Dehiscence. F. E. Walton. —p. 217.
Double Aortic Arch: Report of 2 Cases. W. J. Potts, S. Gibson and R. Rothwell.—p. 227.
Tantalum Gauze in Repair of Large Postoperative Ventral Hernias. C. R. Lam, D. E. Szilagyi and Magda Puppendahl.—p. 234.
End Results of Excision of Carpal Bones. J. K. Stack.—p. 245.
Resection of Trachea: Experimental Study and Report of Case. O. T. Clagett, J. H. Grindlay and H. J. Moersch.—p. 253.
Incarcerated and Strangulated Inguinal Hernia: Critical Survey of 500 Consecutive Cases with Treatment by Nonsurgical (Taxis) and Surgical Procedures. W. Requarth and F. V. Theis.—p. 267.
Anastomosis of Ileum to Lower Part of Rectum and Anus: Report on Experiences with Ileorectostomy and Ileoproctostomy, with Special Reference to Polyposis. R. R. Best.—p. 276.
*Endometriosis in General Abdominal Surgery. S. Abel.—p. 286.

Actinomycosis of Thorax and Abdomen.—In the first of the 6 cases of extensive actinomycosis of the thoracic or abdominal viscera reported by Campbell and Bradford, the disease began with acute appendicitis and progressed to a fatal termination. The clinical course in the second patient was not unlike that in case 1. Though the outcome was little different from that in the previous case, the patient's clinical course appeared to be appreciably altered by the administration of sulfadiazine. The third patient had actinomycosis of the pelvic organs, an extremely rare condition. This patient also died. The fourth patient, who had actinomycosis of the thorax, recovered after surgical drainage and treatment with sulfadiazine and penicillin. The fifth patient was a man, aged 84, who had an orange-sized mass in the right upper quadrant of the abdomen, which was mildly tender. Later he had acute attacks of abdominal pain. It was felt that his age and general debility precluded a successful surgical procedure. His condition gradually deteriorated, and he died. Necropsy revealed a large chronic abscess and colonies of Actinomyces identified by microscopic examination in the wall of the abscess. The case of the sixth patient is noteworthy, because it is believed to be the second one on record in which the patient survived actinomycotic abscess of the liver. Evaluation of chemotherapeutic measures, with particular reference to sulfonamide drugs and penicillin, is difficult, and many years will probably elapse before an accurate appraisal can be made. A definite advance has been made with the addition of sulfonamide drugs and penicillin to the surgical armamentarium.

Endometriosis in General Abdominal Surgery.—Abel is of the opinion that today endometriosis is discovered in roughly half the patients subjected to abdominopelvic operation. This increased incidence results not merely from a more critical evaluation of this disease, but is real. More intrauterine and cervical cautery, with subsequent stenosis, is thought to be an important factor. The symptoms depend to some degree on the distribution of the endometrial changes, but in general can be grouped under the headings of menstrual disorders, pain and infertility. The menstrual disorders are varied, with menorrhagia or hypermenorrhea as perhaps the outstanding ones. Irregularities of flow and even hypomenorrhea are seen. Rectal pain, especially during the menstrual period, is also frequently a part of the story and results from invading rectovaginal implants. With involvement of the ovaries and with the fixation, dyspareunia is occasionally present. Infertility is commonly associated. The cardinal sign of endometriosis is the presence of shotty nodules in the cul-de-sac and rectovaginal septum; this observation of rectovaginal bimanual examination is almost pathognomonic of the disease. The author found that in many instances of endometriosis acute appendicitis was simulated. These cases presented a picture of generalized abdominal pain with localization in some patients. Peritoneal signs were present, apparently the result of irritation from spillage of old grumous bloody material from within the endometriotic lesions. Leukocytosis and fever were usual, and nausea was reported in most instances. The histories of 4 such patients are presented. The lesson the author has learned from such cases is that endometriosis should be kept in mind.

Blood, New York

3:1315-1478 (Dec.) 1948

Cytology of Rabbit Thymus and Regeneration of Its Thymocytes after Irradiation; with Some Notes on Human Thymus. H. Downey. —p. 1315.
Effect of Endocrinopathies on Blood. W. H. Daughaday, R. H. Williams and Geneva A. Daland.—p. 1342.
Observations on Mechanism of Hemolysis in Paroxysmal (Cold) Hemoglobinuria. A. A. Siebens, W. H. Zinkham and P. F. Wagley, —p. 1367.
Events in Hemolytic Crisis of Hereditary Spherocytosis, with Particular Reference to Reticulocytopenia, Pancytopenia and an Abnormal Splenic Mechanism. W. Dameshek and M. L. Bloom.—p. 1381.
*Jaundice and Sulfonamide Drugs. C. H. Rammelkamp.—p. 1411.
Blood and Bone Marrow in Infective Subacute and Chronic Atrophy of Liver. E. Muelengracht and H. Gormsen.—p. 1416.
Myelofibrosis Associated with Tuberculosis: Report of 4 Cases. H. W. Crail, H. L. Alt and W. H. Nadler.—p. 1426.
*Occurrence of Normoblasts in Peripheral Blood in Congestive Heart Failure: Indication of Unfavorable Prognosis. J. Groen and E. G. Godfried.—p. 1445.
Thiamin Deficiency in Rhesus Monkey: Clinical, Metabolic and Hematologic Observations. J. F. Rinehart, L. D. Greenberg and L. L. Ginzton.—p. 1453.
Studies on Hypoproteinemia: I. Hypoproteinemia in Patients with Gastric Cancer; Its Persistence after Operation in Presence of Body Tissue Repletion. F. Homburger and N. F. Young.—p. 1460.
Studies of Phosphorus Metabolism in Man: II. Study of Permeability of Human Erythrocyte to Inorganic Phosphate in Vitro by Use of Radioactive Phosphate (P^{32}). F. H. L. Taylor, S. M. Levenson and M. A. Adams.—p. 1472.

Jaundice and Sulfonamide Drugs.—According to Rammelkamp sulfonamide-induced jaundice may be difficult to differentiate from toxic hepatitis, infectious hepatitis and serum jaundice. Establishment of a definite diagnosis in jaundiced patients is

important because sulfonamide compounds should be discontinued immediately if they are responsible, whereas in jaundice due to other causes sulfonamide drugs may be given. The author differentiates three forms of sulfonamide-induced jaundice, the immediate, intermediate and delayed. In the immediate form of hepatitis secondary to sulfonamide medication jaundice appears one to three days after chemotherapy was started. Prior to this, nausea, vomiting, headache, chills, fever, burning of the eyes and skin rashes may have appeared. As the drug is continued the skin may become icteric and the urine dark with bile. The liver is enlarged and tender and skin rashes appear. An example of this form of hepatitis is reported. Jaundice developed two days after the first dose of a second course of sulfathiazole. In the intermediate form of jaundice the patient becomes critically ill within a few hours, pallor is marked, the liver and spleen may be enlarged and fever is usually present. Hemoglobin may appear in the urine. Later biliuria and urobilinogenuria are observed. The erythrocyte count and hemoglobin concentration are low, and a smear of the blood may show nucleated erythrocytes. The reticulocyte count becomes elevated. The blood usually contains free hemoglobin as well as increased amount of bilirubin. When toxic reactions occur, the drug must be stopped immediately and blood transfusions should be given. The delayed form of sulfonamide-induced jaundice appears ten or more days after the institution of sulfonamide treatment, at about the time clinical improvement is anticipated. The temperature suddenly increases. Nausea, vomiting, epigastric discomfort, headache, dizziness, photophobia and aching of the joints are other symptoms. A distinctive feature is the appearance of a rash which may be erythematous or exfoliative. Erythema nodosum is not infrequently observed in patients treated with the thiazole derivatives of the sulfonamide drugs. Jaundice develops within a few hours or days after these other toxic symptoms have become manifest.

Normoblasts in the Peripheral Blood in Congestive Heart Failure.—During the past year Groen and Godfried have observed 9 patients with severe congestive heart failure, all of whom showed a varying number of normoblasts in the peripheral blood. In some of these cases there was a temporary remission of the sequelae of the heart failure; during this remission the normoblasts disappeared from the peripheral blood. All of the patients died. Brief case histories of these patients are presented. The authors recommend search for normoblasts in the blood of patients with severe heart failure. When normoblasts are found, interference with the oxygenation of the blood, either by pulmonary infarcts or thrombi inside the heart, is most likely to be present. It seems justifiable to consider the prognosis as very grave in these cases.

Connecticut State Medical Journal, Hartford

12:1103-1198 (Dec.) 1948

Social Impact of Alcoholism. S. D. Bacon.—p. 1105.
Effects of Curare and Prostigmine on Central Nervous System: Preliminary Report of Clinical Observations. S. Berman.—p. 1111.
Pancreatic Malignancy: Pancreatico-Duodenectomy. D. F. Levy.—p. 1116.
*Anemia in Hypothyroidism. S. E. Eisenberg.—p. 1122.
Ophthalmologists and Optometrists—Possible Solution to a Problem. P. W. Tisher.—p. 1126.
Screening as Viewpoint in Medical Practice. B. V. White.—p. 1129.

Anemia in Hypothyroidism.—Eisenberg believes that hypothyroidism is frequently overlooked in determining the etiology of obscure anemias or those anemias failing to respond to iron and liver therapy. One reason for this is the fact that diminished metabolism may be present without the distinctive clinical features of myxedema. Anemia resulting from hypothyroidism may be of three types. The first type, simple hyperchromic, is the true, uncomplicated anemia of hypothyroidism. The second type is the hypochromic, an iron deficiency anemia modified by the coexistence of hypothyroidism. The third type, the addisonian hyperchromic, is one of true addisonian pernicious anemia modified by the coexistence of hypothyroidism. The theory is presented that the effects of the thyroid gland on erythropoiesis are indirect results of changes in the rate of metabolism. A case is cited which is an example of both the first and the second type of anemia resulting from hypothyroidism.

Gastroenterology, Baltimore

11:575-788 (Nov.) 1948. **Partial Index**

*Gastric Ulcer: Study of 600 Cases. Frances H. Smith and Sara M. Jordan.—p. 575.
Observations on Excessive Nocturnal Gastric Secretion in Patients with Duodenal Ulcer. J. B. Kirsner, E. Levin and W. L. Palmer.—p. 598.
Benign Stricture of Esophagus with Special Reference to Esophagitis Hiatus Hernia, Esophageal Ulcer and Duodenal Ulcer. E. B. Benedict and R. H. Sweet.—p. 618.
Gastric Polyps. L. L. Hardt, F. Steigmann and G. Milles.—p. 629.
Surgery of Complications of Ulcerative Colitis. L. K. Ferguson and L. W. Stevens.—p. 640.
Studies with Bromsulphalein: I. Its Disappearance from Blood After Single Intravenous Injection. F. J. Ingelfinger, S. E. Bradley, A. I. Mendeloff and P. Kramer.—p. 646.
*Infectious Mononucleosis and Infectious Hepatitis: Studies Bearing on Certain Resemblances and Differences. J. E. Berk, H. Shay, J. A. Ritter and H. Siplet.—p. 658.
Factors Affecting Protein Balance in Presence of Chronic Viral Liver Damage. L. W. Kinsell.—p. 672.
Clinical Aspects of Sequelae of Acute Hepatitis. R. B. Capps.—p. 680.
Total Fecal Solids, Fat and Nitrogen: IV. Study of Patients with Chronic Relapsing Pancreatitis. G. R. Dornberger, M. W. Comfort, E. E. Wollaeger and M. H. Power.—p. 691.
Pancreatic Function as Measured by Analysis of Duodenal Contents Before and After Stimulation with Secretin. G. R. Dornberger, M. W. Comfort, E. E. Wollaeger and M. H. Power.—p. 701.
Studies in Pancreatic Function: I. Preliminary Series of Clinical Studies with Secretin Test. D. A. Dreiling and F. Hollander.—p. 714.
Effect of Enterogastrone Concentrates on Gastric Secretion in Human Beings. R. R. Ferayorni, C. F. Code and C. G. Morlock.—p. 730.
Hyperplasia of Brunner's Glands Simulating Duodenal Polyposis. W. H. Erb and T. A. Johnson.—p. 740.

Gastric Ulcer.—Smith and Jordan are concerned with the differentiation between benign and malignant gastric ulcer, pointing out that this problem raises the question whether all patients with gastric ulcers should undergo gastric resection or whether gastroenterologists should continue their attempts to distinguish between those gastric ulcers which can be trusted to be benign and those which are or may become malignant. The authors present observations on 600 cases. The incidence of malignant gastric ulcers was 9.8 per cent. Forty-seven of 59 cases of malignant ulcer were histologically proved and 12, although clinically considered to be malignant, were not operated on for stated reasons. This study does not furnish final data on the controversial point of whether all gastric ulcers should be resected. Many other such studies should be done so that the gastroenterologist and surgeon whose experience is still insufficient may have some guide. The authors found that the male patient is a little more than twice as prone to gastric ulcer as the female, but more than four times as prone to malignant ulcer. The symptoms are disarmingly similar in the cases of benign and malignant ulcer. The greater curvature and fundus have the highest percentages of malignancy, 60 per cent and 50 per cent. Less than one fifth of the prepyloric lesions are malignant, and the same percentage of malignancy is found on the lesser curvature. The greater frequency of ulcers in these regions diminishes the percentile incidence but does not change the fact that the greatest number of malignant lesions are to be found in these areas. No dependence can be placed on the associated roentgen observation of duodenal ulcer with the gastric lesion in the differentiation of benign and malignant ulcer; in this series, a roentgenologic defect of the duodenum was diagnosed in 31 per cent of those gastric ulcers which were proved malignant. Since recurrent gastric ulcer harbors potential malignancy, a recurrence is an indication for resection, although this policy will result in the resection of many benign ulcers. The first occurrence of gastric ulcer must be treated with persistence. Failure of complete healing within six to eight weeks and all recurrences are justification for resection.

Infectious Mononucleosis and Infectious Hepatitis.—Berk and his associates say that clinical similarities between infectious hepatitis and infectious mononucleosis have long been appreciated. Jaundice has been observed repeatedly in patients considered to have infectious mononucleosis. Interest was aroused by hematologic changes suggestive of infectious mononucleosis noted surprisingly often by one of the authors in soldiers with virus hepatitis. They made serial observations of the behavior of the heterophile antibodies in patients with infectious hepatitis. Similar observations were begun on patients with infectious mononucleosis. Significant increases in heterophile antibody titer were found to occur rarely in infectious

hepatitis in contradistinction to infectious mononucleosis. The agglutinin in the serum in cases of infectious hepatitis differed from that in infectious mononucleosis in its absorbability by guinea pig kidney. In both infectious hepatitis and infectious mononucleosis results of the serum flocculation tests (cephalin cholesterol, colloidal gold, thymol turbidity and 18 hour turbidity ratio) showed a tendency to be positive early and to remain positive for long periods. Hepatic function measured by the ratio of esterified to total cholesterol was far less often abnormal in infectious mononucleosis than in infectious hepatitis. Excretion of sulfobromophthalein was also only occasionally abnormal in infectious mononucleosis. It is suggested that in infectious mononucleosis, even more clearly than in infectious hepatitis, the flocculation phenomena are associated primarily with alterations in the serum proteins and perhaps lipids. Serum alkaline phosphatase shows increased activity in most cases of both infectious mononucleosis and infectious hepatitis during the first month of disease. However, since most of the patients with mononucleosis were not jaundiced while all of those with hepatitis were jaundiced, the mechanisms responsible for hyperphosphatasemia may not be identical.

Journal of International College of Surgeons, Chicago

11:535-672 (Nov.-Dec.) 1948

Observations on Surgery and Surgeons in Europe. H. Acuff.—p. 537.
Our Present Knowledge of Gastric Cancer. W. C. MacCarty Sr.—p. 546.
Selection of Operation to Be Used for Carcinoma in Several Portions of Large Bowel. W. W. Babcock.—p. 551.
Surgical Management of Diverticulitis of Sigmoid. H. E. Bacon and E. R. McKay.—p. 560.
*Mortality Factors in Acute Intussusception in Infants and Children. H. A. Oberhelman and J. B. Condon.—p. 570.
Palliative Operations for Unresectable Carcinoma in Pancreatoduodenal Region. J. W. McCallister.—p. 575.
*Vagotomy for Chronic, Nonspecific, Ulcerative Colitis. P. Thorek. —p. 578.
Solitary Nonparasitic Cyst of Liver. R. F. Hedin.—p. 582.
The Cystic Duct: Its Role in Health, Disease and in Complications and Sequelae of Gallbladder Surgery. M. E. Lichtenstein.—p. 587.
Considerations in Preoperative and Postoperative Management of Patients Requiring Gastrostomy. J. A. Glassman.—p. 592.
Dupuytren's Contracture of Foot. H. W. Meyerding and J. G. Shellito. —p. 595.
The Knee Joint. P. Lewin.—p. 604.
Surgical Repair of Fresh Posterior Lipping Fractures of Tibia. C. Scuderi and E. L. Schrey.—p. 623.
Spina Bifida and Cranium Bifidum. H. C. Voris.—p. 634.
Progress in Treatment of Hyperthyroidism. A. S. Jackson.—p. 640.
Androgens in Gynecology. J. P. Greenhill.—p. 643.
Suction Drainage Era in Surgery. R. C. Chaffin.—p. 649.

Acute Intussusception.—Oberhelman and Condon report 107 infants and children between the ages of 2 weeks and 15 years with acute intussusception. Nineteen patients died; 3 were moribund and died shortly after admission to the hospital; 5 died on the operating table, 3 of them having required resection; 5 died in less than nine hours postoperatively from shock, and 6 died from one to eight days after operation from peritonitis. These fatal complications were the direct result of the intussusception. When such complications arise, surgical treatment is the only hope, and that often ends in failure. Eighty-eight recovered from surgical treatment; only 10 had surgical complications, with evisceration in 3, bronchopneumonia in 4, wound infection in 2 and intestinal obstruction in 1. The greatest single factor in the mortality is the duration of the symptom period. If the symptom period exceeds twenty-four hours complications appear and, as the symptom period increases thereafter, the most effective methods of treatment become progressively less effective. The greatly improved preoperative, operative and postoperative program shared in equally by the pediatrician and the surgeon has greatly aided in a progressive lowering of the mortality rate. Aside from an occasional unexplained death following surgical treatment, the mortality would be reduced to a minimum if treatment could be instituted within the first twenty-four hours. By education of the public to consult the physician early and by stressing early diagnosis by the physician, a "new low" in the mortality of acute intussusception may be anticipated in the near future.

Vagotomy for Ulcerative Colitis.—Thorek performed bilateral, subdiaphragmatic vagotomy on 8 patients with proved chronic, nonspecific ulcerative colitis, all presenting mucus, pus, blood and diarrhea. Seven of them have responded most favorably to vagotomy. In 1 patient, a woman aged 28, the improvement was dramatic for a period of three months, and then following an emotional storm her symptoms recurred. Her insulin tests were inconclusive as to the completeness of the vagotomy. Bilateral subdiaphragmatic vagotomy shows some promise as a therapeutic measure, but no definite conclusions can be drawn at this time. Since the patients previously operated on have not suffered any ill effects and since most of them have actually improved, it is felt that the procedure warrants further investigation.

Maine Medical Association Journal, Portland

39:303-338 (Nov.) 1948

The Transition. H. D. Ross.—p. 303.
Function of Tuberculosis Ward in Central Maine General Hospital. L. Adams.—p. 306.
*Recent Advances in Electro-Shock Therapy. M. E. Witte.—p. 309.
Detection Clinics and Cancer Organization. C. L. Larkin.—p. 313.

Electroshock Therapy.—Witte discusses the safety, the contraindications and the mode of action of electroshock therapy. He believes that electroshock therapy is a fairly safe procedure. It is contraindicated in decompensated heart disease, suppurative disease of the lungs and general bacteremic infection. It is most efficacious in depressions. It can be given in many cases as an outpatient treatment. How electroshock produces results is not definitely known, but there are many interesting theories.

New England Journal of Medicine, Boston

239:903-944 (Dec. 9) 1948

*Effect of Injury to Spinal Cord and Cauda Equina on Sexual Potency of Men. D. Munro, H. W. Horne Jr. and D. P. Paull.—p. 903.
Observations on Etiologic Relationship of Achylia Gastrica to Pernicious Anemia: X. Activity of Vitamin B_{12} as Food (Extrinsic) Factor. L. Berk, W. B. Castle, A. D. Welch and others.—p. 911.
Diphtheritic Myocarditis. N. H. Boyer and L. Weinstein.—p. 913.
*Treatment of Ruptured Liver with Absorbable Hemostatics: Report of 3 Cases. G. W. Papen and S. Mikal.—p. 920.
Thoracic Surgery. J. G. Scannell.—p. 924.
Osteoid Osteoma. Acute Synovitis.—p. 931.
Addison's Disease. Bilateral Cortical Infarction of Kidneys. Tuberculosis of Adrenal Glands, Lungs and Lymph Nodes.—p. 933.

Effect of Injury to Spinal Cord on Sexual Potency.—Munro and his associates decided to investigate the effect of spinal cord injury on the sexual life of 84 of paraplegic and paraparetic patients at Cushing Veterans Administration Hospital. In addition, certain data on priapism collected from some 320 civilian injuries of the spinal cord and cauda equina have been included. The problems of erection, ejaculation and the patient's ability to impregnate his wife were studied in relation not only to the type and level of cord injury but also as to how these functions had been affected by anterior dorsolumbar rhizotomy. The significance of certain analogous functions in the interpretation of loss or retention of sexual capacity has also been considered from the point of view of the innervation of the reproductive organs and has been investigated in terms of anal reflex and type of bladder response to cystometric studies. The authors conclude that unless the patient has a destructive lesion of the sacral cord, a transection of the cauda equina or injury to the cord between the sixth thoracic and third lumbar segments extensive enough to interrupt completely the thoracolumbar sympathetic outflow, he can and should be potent—that is, he should be able to have erections and to ejaculate—and that, unless other abnormalities prevent it, he will be fertile and capable of producing pregnancy.

Absorbable Hemostatics for Ruptured Liver.—According to Papen and Mikal surgery of the liver has lagged behind surgical operations on the other abdominal viscera, mainly because of the difficulty of controlling hemorrhage. With the recent development of absorbable hemostatic substances in the form of sponges and packs, control of hemorrhage from the liver can be obtained. The authors present the histories of 3 patients with traumatic rupture of the liver, who were successfully treated with oxycel® (oxidized cellulose) and gelfoam® (absorbable gelatin sponge). In all cases relatively complete hemostasis was obtained three to five minutes after the laceration had been packed with oxycel® and gelfoam® and gentle pressure applied. No delayed secondary hepatic hemorrhage ensued postoperatively. Pulmonary complications such as atelectasis and hydrothorax were common sequelae, and thoracentesis was frequently resorted to. In 1 case, in which the peritoneal cavity

was drained, a temporary biliary fistula and subhepatic abscess developed, and thoracotomy with rib resection was required. Postoperative biliary peritonitis or fistula never developed when the abdomen was closed without drainage. Hence, primary closure of the abdomen without drainage is advocated. Though the abdominal approach was used in these cases, some surgeons would choose the thoracic method because of the greater exposure of the dome of the liver obtained. When there is trauma to an abdomen, a hollow organ as well as a solid organ may be ruptured. To differentiate perforation of a hollow organ and rupture of a solid organ is often difficult, and the two frequently occur simultaneously. Hence, if the jejunum, ileum or colon is perforated and the liver ruptured, an abdominal approach will give better exposure. If greater exposure of the superior surface of the liver is required, a combined abdominothoracic incision is indicated.

Occupational Medicine, Chicago

5:441-606 (May) 1948

Chemistry of Carcinogens. W. T. Salter.—p. 441.
Job Performance of Physically Impaired Persons in Industry. Jean Spencer Felton.—p. 466.
Employment of Persons with Pulmonary Tuberculosis Lesions. M. W. Jocz, J. J. Prendergast and C. C. Birkelo.—p. 496.
*Aerosols: IV. Effect of Saline Aerosols on Dust in Atmosphere; Reduction of Dust Deposition in Lungs by Saline Aerosols. L. Dautrebande, B. Highman, W. C. Alford and others.—p. 506.
*Place of Psychiatry in Industrial Team. R. R. Cohen and F. G. Ebaugh.—p. 522.
Occupational Health Service in Industry: Program for Meeting Nursing Needs of Smaller Plants. Eleanor C. Bailey.—p. 530.
2, 2-Bis (p-Chlorophenyl) 1, 1, 1-Trichloroethane (DDT): Review of Mammalian Toxicity Studies. J. M. Glassman and R. F. Buchan.—p. 536.

Reduction of Dust by Saline Aerosols.—The finer dust particles suspended in the inspired atmosphere are considered by many a greater health hazard than large particles and are much more difficult to control. Dautrebande and his associates reported evidence in previous papers that aerosols of water may aid in the control of such fine dust particles in the atmosphere by coating and agglutinating them. These aerosols also lessened the amount of dust deposited in the lungs. In the experiments described in the present paper, the authors used aerosols of 5 to 10 per cent sodium chloride solution, the agglutinating property of which is greater than that of water aerosols. The dust used was willemite because even minute particles of this mineral are readily recognized in microincinerated sections of the lungs by their brilliant green fluorescence under ultraviolet rays. The mean diameter of the willemite particles, measured at a magnification of 1,125 under an oil immersion objective, usually approximated 0.5 micron. Groups of rabbits in one series were exposed in a chamber, usually for five hours, to an atmosphere of fine willemite dust mixed with normal air, while comparable groups of rabbits in another series were exposed simultaneously in a similar chamber to the same amount of dust mixed with saline aerosol instead of air. In both series, dust tended to accumulate at bifurcations of the bronchi and alveolar ducts, along surfaces facing the inspiratory current and in the alveoli, particularly near the hilus and adjacent subpleural zones. The amount of dust deposited in the lungs appeared much less in the series of rabbits exposed to particles treated with saline aerosol. Likewise, the dust deposits, particularly in the bronchi, disappeared after a shorter rest period in the groups exposed to the aerosol-treated dust. Results of prolonged exposure will be reported later.

Psychiatry in Industry.—Cohen and Ebaugh show that attitudes, emotions and social needs of workers are extremely important in job adjustment and that emotional guidance, through prevention and treatment of emotional and social maladjustments, belongs in the sphere of the psychiatrist. The author outlines a program which proposes inclusion of psychiatric services in industry as a cooperative project of the university medical center and interested industrial organizations. Planned research, which would last for a trial period of one year, would help improve and formulate practical solutions in the four spheres of prevention of poor worker attitudes, correct job placement, analysis of human relations for supervisors and psychosomatic consultation with plant medical departments.

Ohio State Medical Journal, Columbus

44:1187-1280 (Dec.) 1948

Care of the Chronically Ill. J. I. Goodman.—p. 1205.
Gynecology in the Elderly Patient. R. W. Eddy.—p. 1210.
Metabolic Rate in Practice. C. I. Reed.—p. 1213.
Tonsillectomy and Poliomyelitis in Cuyahoga County, Ohio. C. E. Kinney.—p. 1215.
Nutritional Problems in Surgical Patients with Special Reference to Depletion of Plasma Protein Reserves. F. R. Mautz.—p. 1217.
Alveolectomy—Its Indications and Technic. M. Murray.—p. 1220.
Recent Advances in Plastic Surgery of Face. J. G. Himmel.—p. 1222.

Oklahoma State Medical Assn. Jour., Oklahoma City

41:449-488 (Nov.) 1948

Basic Pre- and Post-Operative Treatment for Cancer of Colon. J. G. Matt.—p. 451.
Ringworm of Scalp: Treatment by X-Ray Epilation. M. O. Nelson.—p. 457.
Protein Metabolism and Use of Amino Acid Preparations. A. A. Hellbaum.—p. 460.
Symptomology and Treatment of Spontaneous Subarachnoid Hemorrhage. R. C. Lawson.—p. 465.

Proc. of Staff Meet. of Mayo Clinic, Rochester, Minn.

23:569-600 (Dec. 8) 1948

Aureomycin in Treatment of Experimental Relapsing Fever and Leptospirosis Icterohaemorrhagica (Weil's Disease). F. R. Heilman.—p. 569.
*Oral Administration of Aureomycin (Duomycin) and Its Effect on Treponema Pallidum in Man. P. A. O'Leary, R. R. Kierland and W. E. Herrell.—p. 574.
Intestinal Obstruction Caused by a Gallstone. F. J. McCready and W. D. Seybold.—p. 579.
Vitamin B12 Therapy in Pernicious Anemia. I. Effect on Hematopoietic System: Preliminary Report. B. E. Hall and D. C. Campbell.—p. 584.
Vitamin B12 Therapy in Pernicious Anemia. II. Effect on General Clinical and Neurologic Manifestations: Preliminary Report. B. E. Hall and D. C. Campbell.—p. 591.
Procaine Penicillin G in Sesame Oil: Study of Reactions and Results in 400 Cases. W. E. Wellman and W. E. Herrell.—p. 595.

Aureomycin in Syphilis.—O'Leary and his co-workers treated 2 men, aged 38 and 24, with acute syphilis, with aureomycin, a new antibiotic elaborated by a strain of Streptomyces. The first patient had a painless scrotal ulcer of two months' duration. Dark field examination of material from this ulcer revealed Treponema pallidum. The patient was given a dose of 400 mg. of the drug by mouth every four hours. This dose was increased to 500 mg. every four hours on the fourth hospital day, to 750 mg. every four hours from the sixth through the seventh day, and from then on 500 mg. every four hours. The aureomycin given totaled 44.2 Gm. At the time of dismissal, sixteen days after admission, all lesions had healed, but there was residual induration at the site of the chancre. The only untoward reactions to therapy were persistent nausea and anorexia beginning four days after treatment was started. The second patient had an ulcer on the anterior surface of the penile shaft of one week's duration. The results of dark field examination for T. pallidum were positive. Aureomycin was administered by mouth in the dose of 750 mg. every four hours for fifteen days for a total dose of 67.5 Gm. Sixteen hours after beginning of the treatment and thereafter the results of dark field examination for T. pallidum were negative. At the end of the treatment period the primary lesion was completely healed. Blood levels for aureomycin varied between 2 and 4 micrograms per cubic centimeter. Untoward reactions consisted of nausea, anorexia and, on one occasion, vomiting. At the end of the treatment there were mild perlèche and a smooth reddened tongue indicating beginning vitamin B deficiency. Aureomycin (duomycin) appears to have some antispirochetal activity when administered by the oral route.

Virginia Medical Monthly, Richmond

75:547-594 (Nov.) 1948

Roentgen Therapy of Bursitis. F. M. Hodges and R. A. Boyer.—p. 547.
Importance of Hematuria. W. W. Scott.—p. 550.
Psychosomatic Effects of Chronic Invalidism. D. C. Wilson.—p. 553.
Thyroid Surgery. J. W. Devine and J. W. Devine Jr.—p. 559.
Diagnosis and Treatment of Neurosyphilis with Negative Blood and Spinal Fluid Wassermanns. J. A. Shield.—p. 564.
Vaginal Cervical Smear in Diagnosis of Uterine Cancer. W. Bickers, P. Sahyoun and Margaret Massie.—p. 568.
Tetanus Neonatorum: Report of Case with Recovery. J. S. Weitzel.—p. 575.

FOREIGN

An asterisk (*) before a title indicates that the article is abstracted. Single case reports and trials of new drugs are usually omitted.

British Journal of Surgery, Bristol

36:8-224 (Oct.) 1948

Radical Mastectomy: Technic and Complications. V. Riddell.—p. 8.
Argentaffinoma of Gastro-Intestinal Tract. D. R. K. Reid.—p. 130.
Neurogenic Tumors of Stomach. R. L. Canney.—p. 139.
Bilharzial Ureter: Some Observations on Surgical Pathology and Surgical Treatment. N. Maker.—p. 148.
*Venous Obstruction in Upper Extremity. E. S. R. Hughes.—p. 155.
Implantation of Secondaries from a Renal Carcinoma (Hypernephroma) within Ureteric Lumen. J. B. Macalpine.—p. 164.
Megalo-Ureter: A Report of 2 Cases. J. H. Carver.—p. 168.
Case of Traumatic Pararenal Pseudohydronephrosis. G. Cleland.—p. 172.
Fistula Between Rectum and Urinary Tract. N. Wyndham.—p. 175.
Accessory Urethral Canal in Male. P. H. Schurr.—p. 181.
*Subphrenic Abscess: Critical Survey of 12 Cases. R. S. Hunt.—p. 185.
Massive Spontaneous Intraperitoneal Hemorrhage. A. C. Brewer and R. Marcus.—p. 198.
Pulmonary Resection for Metastatic Malignancy: 3 Cases Secondary to Hypernephroma. D. Robb.—p. 200.
Spontaneous Rupture of Splenic Artery. J. F. E. Gillam.—p. 203.
Duodenocolic Fistula Complicating Carcinoma Coli. E. P. H. Drake and J. F. Goodwin.—p. 204.
Glossopharyngeal Neuralgia: Extracranial Neurectomy. J. T. Morrison.—p. 208.

Venous Obstruction in Upper Extremity.—Hughes points out that Paget in 1875 and Schrotter in 1884 described a condition wherein an arm of an otherwise perfectly healthy person became diffusely swollen and discolored. Schrotter believed that movements of the shoulder girdle damaged the axillary vein and were thus responsible for the formation of a thrombus. Although many have accepted this theory, neither trauma nor thrombosis is a constant feature. Hughes presents histories of 5 patients with this disorder and says that the prognosis, as far as life is concerned, is excellent, but residual after-effects, varying in degree from trivial to serious, persist probably in all cases, suggesting that obstruction is permanent with recovery dependent on the efficiency of the collateral vessels. Most explanations so far given for this condition suggest a thrombus in the axillary or subclavian vein, but operation frequently reveals no sign of a thrombus. The author describes investigations that have been made on the causation of this condition. The research indicates that the phrenic nerve which passes anterior to the subclavian vein, a prevenous phrenic nerve, may constrict the vessel against scalenus anterior the tendon, as effectively as a ligature. Anticoagulants should be administered as soon as possible to limit the extent of intravascular clotting which may follow secondarily and which may obstruct vessels concerned in establishing a collateral circulation. Paravertebral sympathetic blocks have shortened the convalescence, probably by their influence on the collateral vessels.

Subphrenic Abscess.—Hunt presents observations on 12 cases of subphrenic abscess that came under his observation during the past sixteen months. In 3 of these the subphrenic abscess developed after operations which the author himself had done; in the other cases the original cause, such as appendicitis or perforated peptic ulcer, had been treated at other hospitals. The author stresses that subphrenic abscess may follow inflammation in almost any intra-abdominal organ. Early and efficient treatment of any predisposing cause, such as appendicitis or peptic ulcer, will prevent it. The controversy over Fowler's position and the theories of the spread of infection from below upward by the lymphatics and capillary attraction make it difficult to decide on the best methods of prevention. Fowler's position is difficult to maintain and tends to restrict the breathing, but on occasion it affords the best method of getting dependent drainage. In a diffuse inflammation it is unlikely that a drainage tube will drain anything beyond its immediate track after the first forty-eight hours and should therefore be removed. When the inflammation is well localized the tube will continue to function as long as there is anything to drain or until the abscess walls collapse and the abscess cavity becomes obliterated. It is in such cases that Fowler's position may be employed with advantage. As a rule, a subphrenic abscess needs drainage as soon as a diagnosis is made. Diagnostic needling should be avoided, because there is danger of spreading the infection to pleura or peritoneum or of damaging some intra-abdominal organ. The longer a subphrenic abscess remains untreated the more likely it is that chest complications will follow and the chances of recovery diminish. The extraperitoneal approach should always be employed. An anterior subcostal or paramedian incision is suitable for the anterior spaces and resection of the twelfth rib for the posterior spaces and the right inferior space. Great care is needed to avoid injury to the splenic flexure in left-sided cases. Many different kinds of organisms may be present. Massive doses of penicillin supplemented by sulfonamide compounds are beneficial. A high protein diet, breathing exercises from the start and careful nursing all help to hasten recovery.

British Medical Journal, London

2:1049-1090 (Dec. 18) 1948

Incidence and Treatment of Infective Ear Disease in Factory Employees. C. M. Johnston.—p. 1049.
*Vitamin D in Treatment of Boeck's Sarcoidosis. R. F. Robertson.—p. 1059.
Arsenical Encephalopathy During Treatment of Tropical Eosinophilia. B. Singh.—p. 1061.
*Aortic Coarctation with Patent Ductus Arteriosus. H. A. Haxton and M. L. Thomson.—p. 1062.
Steroid Metabolism and Frontal Lobes. F. Reitman.—p. 1064.

Vitamin D in Boeck's Sarcoidosis.—Robertson reports a case of Boeck's sarcoidosis in which the skin lesions had been slowly progressing for nine years and in which sudden spontaneous improvement was not expected. The administration of calciferol in the form of tablets resulted in dramatic improvement of the skin lesions. The main improvement occurred during a three week period of severe toxic effects unrelated to the level of serum calcium. The author points out that there is evidence that sarcoidosis is related to or identical with tuberculosis. The response of the skin lesions of sarcoidosis to treatment with calciferol resembles that of lupus vulgaris, this being another point in favor of a close relationship between sarcoidosis and tuberculosis. Robertson believes that in view of the risks of causing a sarcoid lesion to flare up elsewhere and of causing sudden extension and ulceration of the skin lesions, calciferol should not be used in the treatment of sarcoidosis unless the lesions are extensive and disfiguring.

Aortic Coarctation with Patent Ductus Arteriosus.—Haxton and Thomson say that although coarctation of the aorta and patent ductus arteriosus are now recognized as defects which are amenable to surgical treatment, the opportunity seldom arises of treating them simultaneously. They present the history of a girl in whom the diagnosis of congenital heart disease had been made at the age of 2 years and 4 months, but the precise defect was not determined at that time. At the age of 7 she presented typical signs of aortic coarctation, and an operation was performed. The mediastinal pleura was incised and reflected to expose the main arteries and the vagus nerve. An aortic coarctation, marked by a narrowing of the exterior and by a palpable thickening of the wall, was found 1 cm. beyond the left subclavian artery, and a small patent ductus, suspected clinically, was attached to the aorta near the level of the coarctation. The coarctation was resected and found to be almost complete. The opening of the ductus was immediately distal to the coarctation. The ends of the aorta were anastomosed by two stay stitches and a single running suture of black silk on an eyeless needle. The suture passed through all coats and an endeavor was made to get square apposition of the cut ends of the vessel. The child is now lively and healthy looking. The early appearance of a well developed collateral circulation indicated a severe degree of coarctation, and the ultimate prognosis with operation was regarded as poor. The right axis deviation seen in this case is noteworthy, because aortic coarctation is usually accompanied by a left axis deviation. It has been suggested by Gilchrist that this may be due to the presence of a patent ductus arteriosus opening distal to the coarctation. In these circumstances the blood is believed to flow from the pulmonary artery to the aorta, thus throwing an additional load on the right ventricle. This case supports Gilchrist's theory, but the small caliber of the duct and the persistence of the right axis deviation eleven months after operation suggest that this is not the full explanation.

Lancet, London

2:915-954 (Dec. 11) 1948

Pathogenesis of Acute Exanthems: Interpretation Based on Experimental Investigations with Mousepox (Infectious Ectromelia of Mice). F. Fenner.—p. 915.
Splenectomy in Kala-Azar. T. C. Morton and J. N. C. Cooke.—p. 920.
The Male-Toad Test for Pregnancy. M. Haines.—p. 923.
Human Toxoplasmosis in England: Report of Case. N. M. Jacoby and L. Sagorin.—p. 926.
*Relapse of Pernicious Anemia During Maintenance Therapy with Folic Acid. D. L. Mollin.—p. 928.
Hyperdurie Premedication. E. Asquith and E. Thomas.—p. 930.

Relapse of Pernicious Anemia During Folic Acid Therapy.—Mollin believes that the danger of the development of subacute combined degeneration of the cord in patients treated with folic acid makes it unlikely that many long term studies will be made of its ability to maintain the hematologic remissions it produces. He presents the history of a patient who relapsed under treatment with folic acid. The average levels of red cells and hemoglobin during the period of successful folic acid therapy were slightly lower than those reached later on liver therapy. The amount of folic acid required to induce the initial remission was small, and the patient was kept in excellent health for eight and a half months on the maintenance doses given. The fall in red cell count began after the patient had been receiving folic acid 5 mg. daily for about four months. This trend could not be reversed by a fourfold increase in the dose of folic acid. Larger doses might possibly have been effective, but it did not seem justifiable to withhold liver extract any longer. The patient responded well to liver extract.

Medical Journal of Australia, Sydney

2:649-676 (Dec. 4) 1948

Management of Delayed Response to Artificial Rupture of Membranes as Method of Inducing Labor. W. M. Lemmon.—p. 649.
Ovulation in the Sexual Cycle and Basal Temperature Patterns. J. W. Johnstone.—p. 653.
Surgical Treatment of Cardiospasm: Cardio-Esophageal Myotomy. A. Gild. —p. 658.

2:677-704 (Dec. 11) 1948

Long-Term Therapy in Thyreotoxicosis with Methyl Thiouracil. H. R. G. Poate.—p. 677.

2:705-732 (Dec. 18) 1948

Significance of Modern Embryology in Pathology. E. S. J. King.—p. 705.
Recent Developments in Social Medicine in New Zealand. G. H. M. Luke.—p. 710.
Bladder-Neck Obstruction: Review of 508 Cases Treated by Endoscopic Resection. H. Mortensen.—p. 714.

Proceedings of Royal Society of Medicine, London

41:735-812 (Nov.) 1948. **Partial Index**

*Modern Conceptions Concerning Compulsory Isolation of Lepers: Contagious Malignant Morbus Hansen versus Non-Contagious Benign Hansenide. R. D. G. P. Simons.—p. 751.
Management and Treatment of Psychopaths in Special Institution in Denmark. G. K. Stürup.—p. 765.
Pharmacology and Biochemical Lesions. R. A. Peters.—p. 781.
Recent Progress in Nasal Physiology. A. W. Proetz.—p. 793.
Purulent Pachymeningitis. H. Cairns and F. Schiller.—p. 805.

Isolation of Lepers.—Simons quotes Rogers and Muir as saying, "As long as we had no treatment of material value there was some excuse for recourse to the crudities of the Middle Ages, the lifelong segregation of lepers." Today, however, one can save energy and money by isolating only the malignant lepromatous and not the hansenide patients. The hansenide patients who leave leper colonies will in their turn encourage others to undergo adequate treatment, since they will see by this example that leprosy is no longer a crime which is punished by imprisonment for life, but that it is curable and certainly in two thirds of all cases not even contagious. Lepers and sufferers from disease classified as leprosy will no longer fly from the police and the doctor. The answer to the question what should be done with the isolated patients is twofold. 1. All patients with infectious leprosy should remain in isolation. Leper homes should be called "clinics" or some such name. Reactions should be negative for at least two years without the appearance of new symptoms before the patient's discharge is considered, as any shorter interval has resulted in too many relapses. 2. All hansenide patients (N or nodular leprosy) should be discharged immediately, though they would have to remain under regular supervision of a skin specialist. The following should be cared for by the public health authorities: Those hansenide patients who suffer from general poor health, or who return to unhealthy and poor environment; also patients who are likely to turn to prostitution or to contract tuberculosis —24 per cent to 32 per cent of all lepers die from tuberculosis and many more suffer from it. Segregation should depend not on the diagnosis of leprosy, but on the differential diagnosis between infectious malignant leprosy and the noninfectious hansenide.

South African Medical Journal, Cape Town

22:697-744 (Nov. 27) 1948. **Partial Index**

Two Cases of Pneumonic Plague: Recovery of One Case Treated with Streptomycin. W. Lewin, B. J. P. Becker and B. Horwitz.—p. 699.
Sterilization with Peritoneoscope. P. L. Playfair.—p. 711.
*The Miller-Abbott Tube: Two Complications in Its Use. W. Wilkie. —p. 714.
Laboratory Procedures in Serodiagnosis of Syphilis: Improved Screen Test. Gwen M. MacNab and W. Lewin.—p. 726.
Some Medical Emergencies in the New-Born: Their Recognition and Treatment. S. Heymann.—p. 734.

Two Complications in Use of Miller-Abbott Tube.—Wilkie reports that two complications of the use of the Miller-Abbott tube not previously reported were recently observed in the same patient. The first complication, occlusion of the lumen of the tube, was produced by shrinking of the thread used to lash the balloon to the tube and was due to failure to wet the thread before use. The result was that after the tube had been introduced the balloon could neither be inflated nor deflated. The balloon contained only about 10 cc. of air, but had the balloon been fully inflated, it would probably not have been possible to remove the tube by any means other than an operation. The second complication was that it was impossible to withdraw the tube. Roentgen investigation showed that the balloon was constantly arrested at the duodenojejunal flexure. In the course of five days many attempts to withdraw the tube failed. Finally the tube was cut at the patient's mouth in order that the distal end and the balloon might eventually be passed per rectum. During the next three days roentgenoscopy revealed that the tube progressed, but the patient had intermittent attacks of cramps and vomiting. These were relieved by morphine. The tube was passed on the third day and the cause of the trouble was then obvious. The house surgeon, in lashing the balloon to the tube, had not trimmed away the excess of balloon material, so that it formed a projection around the proximal lashing of sufficient size to be gripped by the bowel in spasm.

Deutsche medizinische Wochenschrift, Stuttgart

73:581-620 (Dec. 3.) 1948. **Partial Index**

My Road to Leukotomy. E. Moniz.—p. 581.
Pathogenesis and Differential Diagnosis of So-called Functional Headache. W. Tönnis.—p. 583.
Clinical Aspects of Neurologic Complications of Diphtheria. W. Scheid. —p. 585.
The Existential Analysis of Frankl, the Third Direction of the Vienna School of Psychotherapy. W. Soucek.—p. 594.
*Influence of Pregnancy and Delivery on Course of Multiple Sclerosis. J. Hirschmann.—p. 595.
Disturbances in Sympathetic Regulations During Convalescence from Typhus. K. H. Pfeffer.—p. 596.

Pregnancy and Multiple Sclerosis.—Hirschmann points out that there have been cases in which a supervening pregnancy has caused no change whatsoever in existing multiple sclerosis; in other cases, however, pregnancy has been known to cause serious exacerbations. Recent observers have gained the impression that if pregnancy occurs during a chronic progressive form of multiple sclerosis, there is nearly always an exacerbation. The effect of pregnancy in the numerous cases of multiple sclerosis that have an intermittent course remains unclarified. The author investigated the records on multiple sclerosis of the neurologic clinic of the University of Tübingen and found that age is an important factor; that is, the higher the age at which multiple sclerosis and gestation concur the more unfavorable is the prognosis. The critical point seemed to be the transition of the third to the fourth decade. Of 42 women in whom onset or exacerbation of multiple sclerosis concurred with pregnancy or delivery, only 9 were in the third decade of life and the

other 33 were in the fourth decade. In answer to the question whether an interruption of pregnancy might prevent the progression of the multiple sclerosis, the author says that this could be considered in only some of the cases, for the exacerbation frequently appears during the second half of pregnancy, at a time when interruption is too dangerous.

Helvetica Medica Acta, Basel

15:569-638 (Dec.) 1948. **Partial Index**

*In Vitro Culture of Endocrine Glands for Reimplantation Into Human Organism. K. F. Bauer.—p. 569.
Dysproteinemia and Paraproteinemia in Plasmocytoma: Detection by Fractionated Precipitation Curves. P. Guye and J. Joliat.—p. 581.
Differentiation of "Prothrombin Time" According to Quick. P. Frick.—p. 614.
Simple Method for Determination of Potassium in Serum. B. Cagianut.—p. 634.

In Vitro Culture of Endocrine Glands for Reimplantation Into Human Organism.—Bauer discusses the possibility of utilizing endocrine tissue cultures in the treatment of hormonal deficiencies. He attempts to show what may be regarded as possible and what is not possible as yet. The aim is to supply the human organism with hormone-producing cells instead of with chemical hormones. The author mentions three different culture methods that will be suitable for reimplantation into the human organism. Cultures of testes of calves were used in self experiments by the author in order to test local and general reactions. The site of injection remained slightly swollen and sensitive to pressure for a few days, but then these phenomena subsided. For pancreatic cultures material was obtained from a human fetus and in vitro cultures of several days were injected under the fascia lata of the thigh in a patient with diabetes mellitus. The injection was immediately effective, the blood sugar decreased and the patient, who previously had required 20 units of insulin daily, now feels well without insulin. The author admits that 1 case is not sufficient to demonstrate the efficacy of a method. It is possible that much larger doses should be given. The administration of the cultures is without danger. Discussing the possible mode of action of this method, the author considers (1) the hormones contained in the fragment, (2) the living cells of the matrix of the explantation and (3) the living cells of the growth zone. He stresses that after the injection of cultures of endocrine tissue a much larger biologically active surface is created. The third method of culture mentioned, the explanation of complete endocrine glands, is still in its beginnings and according to Bauer's observations is not suitable for all endocrines. The best results are obtained with thyroids, gonads and organs having a large amount of smooth muscle. Tissue cultures have been administered intramuscularly in more than 50 cases. In the majority of the cases there was a subjective improvement.

Journal de Médicine de Lyon

29:867-918 (Dec. 20) 1948. **Partial Index**

*One Year of Treatment with Streptomycin at Tuberculosis Clinic of Lyon; Results and Considerations. A. Dufourt and H. Despeignes.—p. 867.
Insufficiencies and Calamities of Our Antituberculous Armamentarium. A. Dufourt, J. Brun and E. Berthet.—p. 873.
Pulmonary Shadows Originating from Lymph Nodes Following Primary Infection in Children and Adults. A. Dufourt.—p. 879.
Streptomycin and Surgery of Pulmonary Tuberculosis. M. Bérard and P. Juttin.—p. 885.

Streptomycin Treatment for Tuberculosis.—Dufourt and Despeignes treated 120 tuberculous patients with streptomycin. The total dose of the drug varied from 60 to 120 Gm. Of 11 patients with miliary tuberculosis, 6 were cured, 2 recovered temporarily but later died of meningitis in spite of roentgenographic improvement; 1 showed considerable and 1 fair improvement, and 1 was a failure. Of 4 patients with bronchopneumonia, 1 was cured, 2 showed considerable and 1 fair improvement. Of 13 patients with diffuse infiltrations, 1 was cured, 6 showed considerable and 4 fair improvement and 2 were failures. Of 47 patients with limited infiltrations, 11 were cured, 10 were considerably improved, 14 slightly improved and 12 were failures. Of 45 patients with cavities, 10 were cured, 10 others showed considerable and 14 showed fair improvement and 11 were failures. Streptomycin exerts a remarkable effect in cases of miliary tuberculosis and in recent acute cases of congestive type. Definite improvement may result in fresh pneumonic processes and in beginning infiltrations. Good results may be obtained in diffuse bronchopneumonic forms which are not yet far advanced. Results vary from patient to patient in cases of chronic fibrocaseose tuberculosis. Usually the effect of streptomycin is only a relative one and may be exhausted before complete return to health. The volume of some cavities may be diminished, and some may disappear completely. It is likely that the collapse of the cavities depends primarily on the effect on the lesions of the draining bronchi. The streptomycin is effective in tuberculosis of the bronchi as well as in that of the larynx. This antibiotic makes it possible that a large number of tuberculous patients may be benefited by thoracic surgical treatment who otherwise would not because of the gravity and the extent of their lesions.

Nederlandsch Tijdschrift v. Geneeskunde, Amsterdam

92:3597-3704 (Nov. 6) 1948. **Partial Index**

*Frequency of Eclampsia in Wartime. J. L. Mastboom.—p. 3604.
*Less Frequent Secondary Effects of Treatment with Neoarsphenamine: II. Anhidrosis After Dermatitis Caused by Neoarsphenamine. C. Blom-Ides and M. K. Polano.—p. 3625.
Connection Between Goiter and Congenital Defects. F. Pasma.—p. 3630.
Diagnosis of Coarctation of Aorta in Children. J. I. de Bruyne, S. van Creveld and H. A. P. Hartog.—p. 3636.

Eclampsia During Second World War.—Mastboom presents the results of an investigation on the incidence of eclampsia and other toxicoses of pregnancy during the second world war in Amsterdam. A definite reduction was observed in all forms of toxicoses of pregnancy. The author evaluates various factors which may be responsible for this decreased incidence and suggests that it is chiefly due to deficient nutrition which reduced the tonus in the vascular wall and caused a general lowering of the blood pressure. This loss of tonus increases the reserve of circulation. Lack of this reserve involves an insufficient blood irrigation of the intervillous spaces, which is the probable basis for the development of the toxemias of pregnancy.

Anhidrosis After Treatment with Neoarsphenamine.—Blom-Ides and Polano report 2 patients who experienced considerable discomfort when they were exposed to high temperatures. It was found that they had anhidrosis over the major part of their skin. In one of these patients a lichenoid neoarsphenamine exanthem had preceded; in the other, a Negro, an exfoliative neoarsphenamine erythrodermia, which had caused an extensive depigmentation. The authors point out that these cases recall Sulzberger's report on tropical anhidrotic asthenia following lichenoid dermatitis caused by treatment with quinacrine.

Nordisk Medicin, Stockholm

40:2077-2132 (Nov. 12) 1948. **Partial Index**

Roentgen Diagnosis of Bone Tumors. S. Welin.—p. 2077.
*Experiences with Folic Acid. J. Waldenström and L. Andér.—p. 2079.
Premonitory Symptoms in Cardiac Infarction. O. Storstein.—p. 2084.
*Clinical Significance of Right Axis Deviation in Electrocardiogram. K. Ørning.—p. 2089.
Primary Sarcoma of Pericardium. K. Ørning.—p. 2096.
Arteritis Temporalis—Universal Allergic-Rheumatic Disease of Arteries? Case with Necropsy. Annalise Dupont and L. Heerup.—p. 2098.

Experiences with Folic Acid.—Waldenström and Andér found that folic acid treatment of 25 patients with pernicious anemia gave satisfactory hematologic effect in all cases. The results in the 10 patients treated earlier with liver were comparable to those attained by liver treatment. The formation of erythrocytes was perhaps slightly slower with the folic acid dosage applied, which was kept as low as possible. Three cases of megaloblastic anemia refractory to liver responded to treatment with folic acid; in 1 case the effect of massive doses of folic acid lasted for almost two years. Otherwise no storage of folic acid with durable effect occurred. Observation on 15 patients controlled for five months or more seemed to indicate that treatment with folic acid protects against the development of neurologic symptoms but does not affect neurologic symptoms already present. In 1 instance, with neurologic symptoms developed on admission, initial improvement of the symptoms on administration of folic acid gave way to progression of the symptoms, and liver treatment was instituted. Treatment with folic acid alone is not advisable in patients with neurologic complications, and careful control of the nervous system is

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imperative in continued treatment with folic acid. The authors query whether the low incidence of neurologic complications in their cases depends on the low folic acid dosage applied or on a low incidence of such complications in their Uppsala cases. A special field for treatment with folic acid is in patients with aggravated hypersensitivity to liver extract.

Clinical Significance of Right Axis Deviation in Electrocardiogram.—Ørning says that examination of the electrocardiograms of 7,700 patients revealed right axis deviation in 245. In patients with heart disease it appeared most often in mitral stenosis, 60 cases, and in congenital heart disease, 9 cases. In mitral stenosis it was greater in the patients with auricular fibrillation and in those with decompensation. Right axis deviation increases if the heart disease is intractable and tends to increase with the duration of the mitral stenosis, is somewhat more pronounced in cyanotic than in noncyanotic patients in congenital heart disease and is less marked in cases of hypertension than in cases of mitral stenosis. Right axis deviation in the electrocardiogram of patients with various pulmonary diseases appeared more often in cases of chronic disease and was rare in acute pulmonary disease; of the 28 patients with pulmonary disorders 13 had chronic bronchitis. Fifty patients with right axis deviation had gastrointestinal disorders, especially peptic ulcers. Twenty-three patients with right axis deviation, of whom 19 were under 40, had various internal diseases.

Schweiz. Ztschr. f. Pathol. & Bakteriol., Basel

11:553-644 (No. 6) 1948

*Coli-Theory of Appendicitis. F. Kauffmann.—p. 553.
Technic for Demonstration and Count of So-Called Silver Cells in Islands of Langerhans. G. T. Hultquist, M. Dahlén and C. G. Helander.—p. 570.
Degeneration of Intervertebral Disk in Juvenile Patients; Contribution to Pathogenesis of Scheuermann's Disease. R. Laederer.—p. 590.
Effect of Sexual Hormones on Growth. B. Cagianut.—p. 598.
Cloudy Swelling and Mitochondria; Phase Contrast Microscopic Study. H. Zollinger.—p. 617.
New Technic of Biologic Titration of Penicillin. V. Bonifas and E. Edlinger.—p. 635.

Colon Bacillus Theory of Appendicitis.—Kauffmann considers the frequent presence of certain serologic colon bacillus type with K antigens in the normal appendix as an important predisposing factor for appendicitis. The causative agent is on the spot, able at any time to assert its pathogenic faculties as soon as any disorder or injury happens to the mucous membrane of the appendix. Whether or not necrotizing appendicitis develops may largely depend on the presence or absence of necrotizing Escherichia coli strains in the appendix. This may be compared with the significance of certain pneumococcic types to the course of an attack of pneumonia. One knows just as little about the reason why under the given circumstances pneumonia develops in certain persons, as why appendicitis starts. The same Esch. coli types as observed in appendicitis may also be obtained in cultures from peritoneal pus in cases of appendicitic peritonitis in the same patients. The same types are encountered also in infections of the urinary tract and bile ducts, and their etiologic part here cannot be denied. Hence to designate certain serologic Esch. coli types as particularly pathogenic seems justified. They do not always induce infection. In this respect they are not on the same level as highly pathogenic micro-organisms such as plague bacillus and Vibrio comma; they merely possess a conditional pathogenicity. The clinical aspect of acute appendicitis, a true infectious disease, may be explained easily as an infection with certain serologic types of the Esch. coli group. In some cases the possibility of a mixed infection with certain serologic types of enterococci or other bacteria may be taken into account.

Semana Médica, Buenos Aires

55:1049-1086 (Nov. 10) 1948. **Partial Index**

*Hematogenic Tuberculosis: Prognosis. A. P. Heudtlass and A. J. Tassara.—p. 1075.
*Streptomycin in Treatment of Whooping Cough and Complications. J. M. Albores.—p. 1082.

Prognosis of Hematogenous Tuberculosis.—According to Heudtlass and Tassara the factors which have an influence on the prognosis of hematogenous tuberculosis are the virulence and number of tubercle bacilli, and the natural resistance and the immunobiologic and economicosocial condition of the patient. The character of the lesion depends on these factors. An early etiopathogenic diagnosis and continued prolonged observation of the patient with clinical, roentgen and laboratory examinations are important. General hematogenous tuberculosis with involvement of all viscera is acute and almost always fatal. The prognosis is favorable in types of prolonged, slow evolution, except when these types, through the presence of certain determining factors run in successive bouts to either a tertiary form or into a rapidly acute form and death. The response of the patient to the treatment is a reliable prognostic index, especially in types with local foci and in hematogenous cavitation. The classic treatment should be resorted to. Streptomycin is still in the experimental phase in man. In making a prognosis it is advisable to evaluate the fact that the sequels of an early dissemination, the prognosis of which is favorable, can be complicated by superimposed lesions of a new hematogenic focus. Patients with secondary lesions of primary infection should be isolated from the source of contagion and should be protected against factors which favor an unfavorable prognosis. Early diagnosis and serial and prolonged observation of the patient are of great value.

Streptomycin in Whooping Cough.—Albores reviews the literature and comments on the value of early administration of streptomycin. The drug is administered by the intramuscular route. The daily dose for infants and children, respectively, varies from 0.50 Gm. for the former to 1 Gm. for the latter. This dose is administered in either four or six fractional doses which are administered at regular intervals. The treatment is given for five or ten consecutive days. Streptomycin nebulizations are given in the course of the intramuscular treatment in acute forms. The author concludes that the drug is indicated in the following cases: (1) in infants less than 1 year of age; (2) in acute forms complicated with dyspnea, cyanosis or nervous and pulmonary symptoms and (3) as a preventive measure. In such cases the drug is given in nebulized form to infants and children who are living in an epidemic environment and who begin to cough.

Wiener medizinische Wochenschrift, Vienna

98:545-566 (Dec. 18) 1948

*Symptomatology of Traumatic Diaphragmatic Hernia. H. E. Stocker.—p. 545.
Pathogenesis of Malignant Neoplasms. H. Flamm.—p. 547.
Tasks of Social Worker in Psychiatry; Part Played by Mental Deficiency in State of Neglect. A. Juda.—p. 549.
Continuous Spinal Anesthesia. H. Karnitschnigg.—p. 552.

Traumatic Diaphragmatic Hernia.—Stocker reports 4 cases of traumatic herniation in 4 men between the ages of 22 and 54. In 1 patient the herniation resulted from blunt trauma occurring from a fall against the edge of a table, while in the 3 other patients it resulted from penetrating gunshot wounds. These 4 cases revealed that rupture of the diaphragm may be manifested months or even years after the original trauma. Rupture may be the result of a slight subcutaneous injury of the diaphragm, which first could not be demonstrated. Fibrous healing of the wound of the diaphragm presents a spot of lessened resistance where a tear may result from a relatively slight trauma or even from exertion because resistance can no longer be offered to an increased burden. These are the premises for the occurrence of acute symptoms of herniation through the diaphragm, which in the author's cases were manifested two and a half months to eleven months after the original trauma, and in 2 of them after a forced march for several hours. Escape of abdominal viscera into the thorax with prolapse of the spleen occurred in 2 of the cases of percutaneous rupture of the diaphragm. In one, death occurred eight days after surgical intervention in which the adhesions between the spleen and the internal thoracic wall were loosened and the spleen returned to its normal position, while fatal peritonitis resulted from spread of an infection with streptococci. In the other case the prolapsed spleen was left in the thoracic cavity; the patient recovered and there were no harmful sequelae.

Book Notices

Human Biochemistry. By Israel S. Kleiner, Ph.D., Professor of Biochemistry and Director of the Department of Physiology and Biochemistry, New York Medical College, Flower and Fifth Ave. Hospitals, New York. Second edition. Cloth. Price, $7. Pp. 649, with 77 illustrations. C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, 1948.

The practice of medicine today is difficult without some understanding of human biochemistry. Often the books that are prepared are intended more for the medical student and chemical student than for the practitioner; such books are too technical for the audience that could use them to considerable advantage. This volume does not provide so much detail that the reader becomes lost in the pages. It offers comparatively brief discussions that can be quickly read and easily understood. Included in the chapters are discussions on physical chemistry, carbohydrates, lipids, proteins, body tissues, milk, blood, enzymes, digestion, chemical changes within the large intestine, vitamins, foods, physiologic oxidations, nitrogen metabolism, carbohydrate metabolism, lipid metabolism, mineral metabolism and water balance, urine, the chemistry of respiration and acid-base balance, energy metabolism, changes in the chemical composition of blood, hormones, and certain clinical applications which involve function tests and other problems of clinical significance.

Formulary Bellevue Hospital. (Prepared by Bellevue Hospital Committee on Drugs and Formulary.) Dr. Edward L. Bernecker, Commissioner, Department of Hospitals, City of New York. Dr. William F. Jacobs, Medical Superintendent, Bellevue Hospital, New York. Paper. Pp. 72. The New York Physician, 1440 Broadway, New York 18, 1948.

This formulary lists the agents found acceptable by the Bellevue Hospital Committee on Drugs and Formulary for the dispensing of drugs to treat patients at Bellevue Hospital. The purpose of the formulary is "first, to assure that the patients treated at Bellevue Hospital are given the benefit of the most effective and accepted therapy; second, the institution, because of its vast teaching facilities, has the obligation to the physician to have available to him the most recent advances in therapy." The formulary is not a textbook of therapeutics or pharmacology, and provides no indication of the therapeutic use of the contained drugs. This is the way hospital formularies should be prepared, and the committee is right in feeling "strongly that no one should use a drug until he is thoroughly familiar with its pharmacologic action, therapeutic indications, dosage, and signs of toxicity. Such information could never be adequately contained in a pocket Formulary." However, a therapeutic classification, offered as a guide only, is included at the end of the formulary. This booklet is an adequate testimony to what can result from a careful study of drugs that are used in a hospital and the formation of a formulary committee to assure the proper use of these drugs.

Practical Orthodontics. (Original Text by the Late Martin Dewey.) Revised by George M. Anderson, D.D.S., Professor of Orthodontics, Baltimore College of Dental Surgery, Baltimore. With Chapters by Bernhard Wolf Weinberger and others. Seventh edition. Cloth. Price, $10. Pp. 556, with 640 illustrations. C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, 1948.

There is much valuable fundamental material covered by the seventh edition of this book. It contains a chapter on the field of orthodontics as a dental specialty, including definitions, objectives and benefits of this science. There is an inclusive and pertinent history on the background and progress of modern orthodontics. The volume continues with lengthy discussions on etiology, diagnosis, classification and the mechanical methods of treatment and retention of malocclusions of the teeth. A parallel is drawn between medical and orthodontic diagnosis. The former is generally concerned with a pathologic condition and is determined symptomatically or by the exclusion of other diseases. Orthodontics for the most part does not involve a pathologic condition, but presents a problem in diagnosis concerned with growth and development (or lack of) of the body as a whole, and the teeth, jaws and face in particular. In its own field each has the same importance in relation to prognosis and treatment. Fortunately for orthodontics, the diagnosis need not be made in haste, but periodic observation gives a splendid opportunity to observe the growth pattern, habits and general health of the patient. While there is a chapter by Broadbent on his original roentgenographic cephalometric growth studies, there is not a discussion of the clinical application of cephalometrics to case analysis and treatment planning as used by Downs, Thompson and Wylie and others. There is no comprehensive discussion on the growth of the mandible, its effect on the denture pattern and the influence of mandibular rest position on case analysis and treatment planning. A chapter is devoted to extraction in its relation to orthodontic treatment. The profession has generally been divided into three classes in their attitude toward this subject, and the author attempts to show that there is a place for extraction in orthodontics but warns that if the privilege is abused by poor judgment, the removal of teeth will produce its repercussions and poor results. This book is a fine source of information and is considered to be one of the five or six standard texts in the field of orthodontics.

The Netherlands Red Cross Feedingteam Report on Nutritional Survey in the Netherlands East Indies Conducted During October 1945 till June 1946. Boards. Pp. 119, with illustrations. Netherlands Red Cross Society, The Hague, 1948.

Immediately on the capitulation of Japan a Netherlands Red Cross Nutrition Research Team was organized, and within a week an advance contingent was on its way to Java. There they found chaos but set to work to aid and to study the large population groups malnourished after years of life in military internment camps and prisons. This report of their work is a valuable contribution to our knowledge of nutrition, of tropical disease and the problems of organized medical relief work. A large part of the report, which reflects the orientation of the research program, is concerned with the laboratory evaluation of the state of vitamin nutrition, but the notes on clinical findings are perhaps more interesting. Simple caloric deficiency was not extreme, but the results of prolonged malnutrition were numerous and puzzling. Many unexpected problems arose and some of these were solved by ingenious improvisation. The high infant mortality was checked by a "wonder milk" produced from dried milk by bacterial culture. The forensic medical problem of appraising the evidence in suspected cannibalism was solved by a study of the crystals formed in congealing fat. However, as in other contemporary studies on famine victims, the recognition of unsolved problems is perhaps the most important feature of the report. The lack of vascular, thermal and other reactions of standard stimuli in the underfed, combined with the disappearance of allergic complaints, poses problems—and perhaps gives a clue to their study—which have many ramifications.

The Story of the Johns Hopkins: Four Great Doctors and the Medical School They Created. By Bertram M. Bernheim, M.D. Cloth. Price, $3.50. Pp. 235, with 16 illustrations. Whittlesey House, McGraw-Hill Book Company, Inc., 320 W. 42d St., New York 18, 1948.

A story of the development of Johns Hopkins Medical School from 1889 to the present day with particular emphasis placed on human interest. The author states that he has been associated with the school for the past fifty years. The book deals with the founding and subsequent development of the Johns Hopkins Medical School and Hospital. Development is related to the lives of its four best known founders, Dr. W. H. Welch, Dr. W. Osler, Dr. W. Halsted and Dr. H. Kelly. The lives of these men, who contributed to the flowering of Johns Hopkins Institution, and the near and distant impact of the traditions of Johns Hopkins on medicine are described. Chapters are devoted to special historical occurrences at Johns Hopkins, such as the admission of women, the development of the resident system, Harvey Cushing and the Hunterian laboratory, and development of the "Welch Institute of the History of Medicine." Contributions of other men are mentioned, such as Hugh Young, in urology, J. W. Williams in obstetrics and M. T. Finney in surgery.

A chapter is devoted to the decision of Johns Hopkins to adopt complete full time employment of physicians with comment on the probable effect of this decision on the future of the institution.

Much of the material is of interest to all physicians, particularly the chapters which refer to the four outstanding founders of Johns Hopkins. Other sections will interest only those associated with Johns Hopkins, as former students or staff.

Queries and Minor Notes

THE ANSWERS HERE PUBLISHED HAVE BEEN PREPARED BY COMPETENT AUTHORITIES. THEY DO NOT, HOWEVER, REPRESENT THE OPINIONS OF ANY OFFICIAL BODIES UNLESS SPECIFICALLY STATED IN THE REPLY. ANONYMOUS COMMUNICATIONS AND QUERIES ON POSTAL CARDS WILL NOT BE NOTICED. EVERY LETTER MUST CONTAIN THE WRITER'S NAME AND ADDRESS, BUT THESE WILL BE OMITTED ON REQUEST.

HEREDITY AND TUBERCULOSIS

***To the Editor:*—Do children born of tuberculous parents have a hereditary susceptibility or a tuberculous diathesis?**

Edward K. Disney, M.D., Outwood, Ky.

ANSWER.—Scientific evidence does not justify the belief that children born of tuberculous parents have a hereditary susceptibility or a tuberculosis diathesis. Expressions to that effect are based entirely on personal opinion. Galen (131-201 A. D.) was of the opinion that approximately one half of the cases of tuberculosis were due to heredity and the other half to contagion. He became the authority in medicine for the next 1,500 years, or until the Renaissance in medicine. Throughout these centuries there were two schools of thought, one clinging to the hereditary nature of tuberculosis, and the other to its contagiousness. The school believing in the contagious nature of tuberculosis became strong enough to cause the enactment of laws in Italy and Spain in the last half of the eighteenth century to control the contagiousness of the disease. The inheritance theory became so firmly implanted in the human mind, however, that it has been carried down to the present day despite the overwhelming evidence that the disease is caused by a micro-organism, and therefore is contagious, and the total lack of scientific evidence for inheritance.

Even congenital tuberculosis is relatively rare, as determined by necropsy examination of stillborn infants and those who die from various causes soon after birth. It is a great rarity for a newborn infant to react to tuberculin. Chadwick administered the test to 156 newborn infants of tuberculous mothers, and not one reacted. Apparently congenital tuberculosis occurs only when the placenta becomes involved so that its barrier effect is lost.

Early in this century Grancher of France demonstrated that when infants did not have contact with their tuberculous mothers after birth but were placed in foster homes they did not subsequently contract more tuberculosis than the children of the general population. This observation has been confirmed many times. Children of tuberculous mothers or fathers do contract more tuberculosis than those of the general population if they remain in contact with the parents. Children of tuberculous parents who do not have contact with the parents after birth but who at some subsequent time are exposed to contagion do not contract more primary tuberculosis than children under the same circumstances of parents not having tuberculosis. Moreover, the children of tuberculous parents who subsequently have primary lesions are not more likely to have the acute and chronic reinfection forms of the disease than are those from homes where there is a total absence of tuberculosis.

The theories which permit the fatalistic point of view that the child of tuberculous parents is more susceptible to tuberculosis because of heredity, or the opposite, that the child of nontuberculous ancestry is more susceptible because of the absence of inherited immunity, are untenable. The entire problem resolves itself into one of infection with tubercle bacilli, which usually occurs after birth. All children have an effective defense mechanism against the first invasion with this organism. However, this is not adequate to destroy tubercle bacilli, and thus some of them subsequently have acute and chronic reinfection forms of clinical tuberculosis, regardless of the presence or absence of this disease in their ancestors.

POSTNASAL DISCHARGE

***To the Editor:*—What are the common causes of "postnasal drip"? What are the most successful ways of treating this condition? Is antrum lavage of benefit?**

M.D., New York.

ANSWER.—"Postnasal drip" is the term used to describe the chronic accumulation of secretion in the nasopharynx, from where it may "drip" down into the pharynx. Such secretions usually originate in the nose or sinuses and are carried back by the ciliary mechanisms into the nasopharynx. There are several possible causes for such an accumulation, some of which are chronic inflammatory states in the nose and sinuses caused, for example, by infections or irritants, allergic reactions in the nose or a simple vasomotor response either to external, systemic or neurogenic factors.

Antrum lavage is indicated only when the antrum is the site of chronic infection and retains an accumulation of secretion which may thus be removed. The recovery of ciliary action and normal emptying of the sinus is thereby promoted.

HYPOCHLOREMIA

***To the Editor:*—A paracentesis was performed on a 45 year old patient with nodular cirrhosis; 2,000 cc. of fluid was removed and the wound allowed to drain. After four days extreme weakness developed and the patient could "hardly lift his glass of water." Blood chlorides were 120 mg. per hundred cubic centimeters and nonprotein nitrogen 120 mg. The patient was given 13 Gm. of sodium chloride intravenously and by mouth that day, and in a few hours his strength and general appearance improved. Chlorides and nonprotein nitrogen returned to normal in three days. There has not been a recurrence. The patient had been on a salt-poor diet previous to this episode. He does not have findings suggestive of Addison's disease. What explanation can be offered for this and what future care is suggested?**

M.D., New Jersey.

ANSWER.—It has recently been shown that a considerable shift of chloride ion into extracellular spaces may occur in primary hepatic disease, but it is rare to find any significant depression in blood chlorides. However, after tapping in cirrhosis, a significant hypochloremia may develop which is frequently masked by hemoconcentration (Cantarow, A.: *Am. J. Clin. Path.* **8**:142-152 [March] 1938). It is certainly most unusual to encounter a chloride deficiency of this degree in a cirrhotic patient, and, unless the laboratory methods employed are known and whether the determinations were made on whole blood or serum, it would be impossible to reduce the deficiency to terms of milliequivalents per liter. The amount of sodium chloride (13 Gm.) which was required to relieve the patient's symptoms and bring the blood chlorides to a normal level is rather small, a fact which indicates the possibility of a laboratory error.

It would seem advisable to observe the blood chloride levels in this case before and after tapping, while the patient is taking a normal amount of sodium chloride. Calculation of the chlorides in the ascitic fluid and hematocrit readings on the patient's blood would then permit a fairly accurate appraisal of the chloride losses. This would, of course, simplify the problem of replacement of chlorides.

TREATMENT OF MENOPAUSE

***To the Editor:*—A white woman aged 50, nulliparous, has had menopausal symptoms for the past ten years. She began menses at age 11 and had severe dysmenorrhea until her late twenties, at which time the dysmenorrhea abated somewhat. Her menstrual periods were frequent, beginning with seven day intervals and advancing to twenty-one day intervals at 30 years of age. At age 40 she had irregular menses and hot flashes. In 1943 she had only two menstrual periods. She was given estrone every three weeks for nine weeks. At the end of this time she flowed profusely and the therapy was discontinued. In 1946 she had estrogen therapy and flowed profusely each time after receiving 10,000 units. In January 1947 she took diethylstilbestrol 0.5 mg. every three or four days. She did not flow but had the sensation of impending menstruation. I saw her on Nov. 6, 1948, for the first time. She continues to complain of hot flashes, nervousness and headaches. Her last menstrual period was in October 1943. Pelvic examination is negative. What therapy can be recommended?**

M.D., Nebraska.

ANSWER.—A patient bleeding as irregularly as the patient mentioned deserves a diagnostic curettage for diagnosis. Following this determination of basal metabolic rate and cholesterol should be performed to determine thyroid function. If these are normal or subnormal give thyroid to tolerance starting with ½ grain (30 mg.) and raising it ½ grain every three to four weeks until the morning pulse rate before arising is just under 80.

Phenobarbital, ½ grain one to three times a day, will help remarkably.

If curettings are negative for carcinoma, then the patient can be started on 1 mg. diethylstilbestrol a day until symptoms are relieved, but not for more than thirty days. The dose then should gradually be cut down to the least compatible with symptom abatement. Many physicians believe that estrogen should not be given more than about three fourths of the time; that is, give it for twenty-one days, stop for ten days, and then start again.

It must be remembered that not all patients with the symptoms complained of are suffering from menopause. A large psychic factor occurs.

HEREDITY IN EPILEPSY

To the Editor:—A couple consulted me as to the advisability of parenthood. They are both 30 years of age and are second cousins (grandfathers were brothers; mother of wife and father of husband are first cousins). There is a history of grand mal epileptic seizures in the wife's father, her father's brother and sister. Epilepsy does not occur on the husband's side. Would the chances of epileptic offspring be influenced by the family interrelationship? What are the chances of the parents' having an epileptic child and also the chances of future development of epilepsy in the wife?

T. E. Swegart, M.D., Maquoketa, Iowa.

ANSWER.—Because the wife's blood relationship to her husband was through her mother, and not through her father (the epileptic), consanguinity would not add anything to the chances of epilepsy in the children of the couple named. The wife's father is the only affected limb of the family tree. Information is lacking about any family history of migraine, or whether some acquired condition might have been responsible for the epilepsy of the father, uncle and aunt of the wife. At the age of 30 her chances of having clinical symptoms are slight, certainly much less than the 1 in 40 chance of the average near relative of an epileptic. If the husband does not carry a predisposition, the chances of their having an affected child are reduced still further. Electroencephalograms of the couple might define the chances more clearly (Lennox, W. G.: Marriage and Children for the Epileptic, *Human Fertil.* **10:** 97-106 [Dec.] 1945).

PERMANENT BRAWNY EDEMA

To the Editor:—A 33 year old para III gravida III has had massive pitting edema of the entire leg from thigh to foot since an attack of phlebitis following the birth of her first child in 1938. The edema is greater in the left leg and fluctuates somewhat from day to day. Signs of cardiovascular disease are absent. What treatment is recommended?

M.D., Indiana.

ANSWER.—The condition is difficult to improve if the usual methods have been tried and have failed. Usual methods consist of bed rest for several days with leg elevated, full length elastic stockings (made to order by fitting when swelling is least) whenever patient is up and bed rest twice a day for one hour with leg elevated.

If the swelling can be decreased scar tissue is less likely to form in the edematous tissue. Such fibroblastic proliferation causes the permanent brawny edema.

Any suspicion of dermatophytosis between the toes must be treated thoroughly with fungicides. Veins should not be injected with sclerosing solutions and should not be ligated, because venous collaterals should be preserved. If much brawny edema has already formed the treatment is surgical. The Kondoleon operation consists of removal of large amounts of such tissue.

TREATMENT OF BREAST AMPUTEES DURING PREGNANCY

To the Editor:—A patient, para III, about four months pregnant, had both breasts amputated because of hypertrophy in 1944. Diagnosis was unknown by the patient. She has some breast tissue at present and is beginning to become uncomfortable. What type of treatment should be given to this patient?

J. B. Carlyle, M.D., Burlington, N. C.

ANSWER.—The breasts usually stop developing during pregnancy between three and four months; therefore treatment is not necessary now. At delivery start the patient on 5 mg. of diethylstilbestrol each night at bedtime for four or five nights and use an ice bag if pain develops. Limit fluid intake moderately.

Breast tissue without ducts is common in the axilla during pregnancy, and the described treatment is usually all that is necessary.

EDEMA OF RETINA

To the Editor:—A month ago a 37 year old man looked at a telephone pole and noticed that it seemed to bow much to his left if he used his left eye only. Straight edges seemed to bow down when the same eye was used. After correction of mild hyperopia, astigmatism and exophoria for far range, bowing in both directions remained the same. Retinoscopic examination was normal. History of injury is absent. The patient complains of mild pain near the left temple and in the left occiput. Please suggest diagnosis and treatment.

O. C. Amstutz, M.D., Bellefontaine, Ohio.

ANSWER.—The image distortion suggests a localized elevation or edema of the retina near the fovea, probably immediately superior and nasal to it. This may occur in early choroiditis, retinal detachment, macular edema or cyst. Such lesions may be almost impossible to detect except by ophthalmoscopy with red-free light. Treatment must be directed toward the cause.

VERTIGO FROM STREPTOMYCIN

To the Editor:—A patient with draining tuberculous sinuses (inguinal and posterior iliac) of twenty years' duration was treated with 1 Gm. of streptomycin daily. Streptomycin was discontinued after fifteen days because of severe vertigo. The sinuses are healed. After three weeks the eighth nerve impairment seems to be improving. Is there any therapy for relief from this vertigo? If the sinuses reoccur would another course of streptomycin be advisable, assuming a recovery from the present vestibular dysfunction?

W. W. Montgomery, M.D., West Rutland, Vt.

ANSWER.—Therapy for the relief of vertigo following damage by streptomycin to the vestibular apparatus is not known. However, it has been found that after a few months, even without regeneration of the vestibular nerve, the patient improves greatly because of cerebellar compensation.

Recurrence of the draining sinuses once healing has taken place is unusual. However, dihydrostreptomycin in equal dosage has proved to be equally effective, and less toxic in its action over a longer period of time. A dosage of 0.5 Gm. daily is probably as effective in the treatment of draining tuberculous sinuses as 1 Gm.

OPTICAL LENSES

To the Editor:—What methods may be used to determine the qualities of optical lenses in spectacles needed for good vision? What apparatus can be used in the office to make such tests?

Joseph Bogan, M.D., Washington, D. C.

ANSWER.—Ophthalmologists do not regularly use precise methods to determine whether or not the optical lenses which they prescribe for patients have special qualities suitable for good vision. The manufacturers all supply lenses which are perfectly adequate. Even glass which has aged through many years of exposure to the sun's rays and has acquired a slight yellowish color apparently does not prevent the patient from seeing just as well, in every detail, as he can through brand new glass. The Bureau of Standards, Washington, D. C., can furnish further detailed information.

HYDROCEPHALUS

To the Editor:—In Queries and Minor Notes (The Journal, January 15, p. 194) the question was asked whether occurrence of hydrocephalus or other abnormalities in one child might indicate probable occurrence of abnormalities in subsequent offspring of the same woman.

The answer stated that a subsequent child might suffer from hydrocephalus, that this was extremely unlikely to occur but that hydrocephalus had been observed in several members of the same family. In the absence of a family history of hydrocephalus, the advice was given that, in having additional children, the parents of a hydrocephalic child run no greater risk in having another hydrocephalic child than do all other parents.

Murphy (Murphy, D. P.: Congenital Malformations: A Study of Parental Characteristics with Special Reference to the Reproductive Process, ed. 2, Philadelphia, J. B. Lippincott Co., 1947) studied the outcome of all conceptions of 890 women, each of whom had given birth to a congenitally malformed child.

He discovered 1 malformed brother or sister in every 8 who were born alive after the birth of the first defective child. In the general population he found only 1 malformed child for every 200 infants that were born alive. Translated into other terms, a mother of a congenitally malformed child, irrespective of the type of defect, is twenty-five times more likely to have another defective offspring than is a mother in the general population.

Anomalies of the central nervous system represented 60 per cent of all of the body defects which Murphy studied, and hydrocephalus accounted for nearly half of these.

Forty of the 890 original families had 2 or more defective offspring. Nine of these 40 families contained hydrocephalic children. Seven of the 9 families each had 2 hydrocephalic children. Four of these 9 families each had an anencephalic child, and 2 of the 4 families had 2 anencephalic children in addition to a hydrocephalic one.

Murphy's study showed also that there is nearly 1 chance in 2 that a subsequent malformed child will exhibit the same defect as that possessed by its earlier born defective brother or sister. This is a high frequency for the reduplication of a defect in a family in view of the great variety of anomalies which may appear at birth.

In view of these observations, and also because, in many instances, normal brothers and sisters resemble one another in many respects, the outlook for the birth of normal offspring does not appear to be as bright for the parents of a hydrocephalic child as for parents in the general population.

Douglas P. Murphy, M.D., Philadelphia.

To the Editor:—I have delivered babies with mongolism. One baby was the second child in a family in which the previous child was normal. The second baby was the third child in a family in which the first child was mongolian and the second child normal. The third baby was the fifth child in a family where the first child was normal, the second had mongolism, the third and fourth children were normal and the fifth had mongolism.

These children have all been seen by recognized pediatricians.

In my experience mongolism does appear more than once in the same family.

Peter B. Rudy, M.D., Spokane, Wash.